

**PACKAGING INFORMATION**

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)      |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|--------------------------|
| <a href="#">TL431ACD</a>      | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | 431AC                    |
| TL431ACD.A                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | 431AC                    |
| <a href="#">TL431ACDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (TACG, TACJ, TACS)       |
| TL431ACDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (TACG, TACJ, TACS)       |
| <a href="#">TL431ACDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (TACG, TACJ, TACU)       |
| TL431ACDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (TACG, TACJ, TACU)       |
| <a href="#">TL431ACDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (TAC3, TACG, TACS, TACU) |
| TL431ACDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (TAC3, TACG, TACS, TACU) |
| <a href="#">TL431ACDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TAC3                     |
| TL431ACDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TAC3                     |
| <a href="#">TL431ACDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (TAC3, TACG, TACS, TACU) |
| TL431ACDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (TAC3, TACG, TACS, TACU) |
| <a href="#">TL431ACDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TAC3                     |
| TL431ACDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TAC3                     |
| <a href="#">TL431ACDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T4S, T4U)               |
| TL431ACDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (T4S, T4U)               |
| <a href="#">TL431ACDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | 431AC                    |
| TL431ACDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | 431AC                    |
| <a href="#">TL431ACDRG4</a>   | Obsolete      | Production           | SOIC (D)   8     | -                     | -           | Call TI                              | Call TI                           | 0 to 70      | 431AC                    |
| <a href="#">TL431ACLP</a>     | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | TL431AC                  |
| TL431ACLP.A                   | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | TL431AC                  |
| <a href="#">TL431ACLPM</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | TL431AC                  |
| TL431ACLPM.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | TL431AC                  |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)      |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|--------------------------|
| <a href="#">TL431ACLPR</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | TL431AC                  |
| TL431ACLPR.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | TL431AC                  |
| <a href="#">TL431ACP</a>      | Active        | Production           | PDIP (P)   8     | 50   TUBE             | Yes         | NIPDAU                               | N/A for Pkg Type                  | 0 to 70      | TL431ACP                 |
| TL431ACP.A                    | Active        | Production           | PDIP (P)   8     | 50   TUBE             | Yes         | NIPDAU                               | N/A for Pkg Type                  | 0 to 70      | TL431ACP                 |
| <a href="#">TL431ACPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 4A                       |
| TL431ACPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 4A                       |
| <a href="#">TL431ACPSR</a>    | Active        | Production           | SO (PS)   8      | 2000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431A                    |
| TL431ACPSR.A                  | Active        | Production           | SO (PS)   8      | 2000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431A                    |
| <a href="#">TL431ACPWR</a>    | Active        | Production           | TSSOP (PW)   8   | 2000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431A                    |
| TL431ACPWR.A                  | Active        | Production           | TSSOP (PW)   8   | 2000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431A                    |
| <a href="#">TL431AID</a>      | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | 431AI                    |
| TL431AID.A                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | 431AI                    |
| <a href="#">TL431AIDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (TAIG, TAIJ, TAIS)       |
| TL431AIDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (TAIG, TAIJ, TAIS)       |
| <a href="#">TL431AIDBVRG4</a> | Obsolete      | Production           | SOT-23 (DBV)   5 | -                     | -           | Call TI                              | Call TI                           | -40 to 85    | TAIG                     |
| <a href="#">TL431AIDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (TAIG, TAIJ, TAIU)       |
| TL431AIDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (TAIG, TAIJ, TAIU)       |
| <a href="#">TL431AIDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3AG, TAI3, TAIS, TAIU) |
| TL431AIDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T3AG, TAI3, TAIS, TAIU) |
| <a href="#">TL431AIDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TAI3                     |
| TL431AIDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TAI3                     |
| <a href="#">TL431AIDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3AG, TAI3, TAIS, TAIU) |
| TL431AIDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T3AG, TAI3, TAIS, TAIU) |
| <a href="#">TL431AIDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TAI3                     |
| TL431AIDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TAI3                     |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)         |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|-----------------------------|
| <a href="#">TL431AIDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | T5U                         |
| TL431AIDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | T5U                         |
| TL431AIDCKRE4                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | -           | Call TI                              | Call TI                           | -40 to 85    |                             |
| <a href="#">TL431AIDCKRG4</a> | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T5U                         |
| TL431AIDCKRG4.A               | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T5U                         |
| <a href="#">TL431AIDCKT</a>   | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | T5U                         |
| TL431AIDCKT.A                 | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | T5U                         |
| <a href="#">TL431AIDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | 431AI                       |
| TL431AIDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | 431AI                       |
| <a href="#">TL431AIDRG4</a>   | Obsolete      | Production           | SOIC (D)   8     | -                     | -           | Call TI                              | Call TI                           | -40 to 85    | 431AI                       |
| <a href="#">TL431AILP</a>     | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431AI                     |
| TL431AILP.A                   | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431AI                     |
| <a href="#">TL431AILPM</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431AI                     |
| TL431AILPM.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431AI                     |
| <a href="#">TL431AILPR</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431AI                     |
| TL431AILPR.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431AI                     |
| <a href="#">TL431AIPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 4B                          |
| TL431AIPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 4B                          |
| <a href="#">TL431AQDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (TAQG, TAQJ, TAQU)          |
| TL431AQDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (TAQG, TAQJ, TAQU)          |
| <a href="#">TL431AQDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (TAQG, TAQJ, TAQU)          |
| TL431AQDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (TAQG, TAQJ, TAQU)          |
| <a href="#">TL431AQDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (TAQ3, TAQG, TAQS,<br>TAQU) |
| TL431AQDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (TAQ3, TAQG, TAQS,<br>TAQU) |
| <a href="#">TL431AQDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | TAQS                        |
| TL431AQDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | TAQS                        |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)         |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|-----------------------------|
| <a href="#">TL431AQDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (TAQG, TAQS, TAQU)          |
| TL431AQDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (TAQG, TAQS, TAQU)          |
| <a href="#">TL431AQDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | TAQS                        |
| TL431AQDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | TAQS                        |
| <a href="#">TL431AQDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | T7U                         |
| TL431AQDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | T7U                         |
| <a href="#">TL431AQDCKT</a>   | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | T7U                         |
| TL431AQDCKT.A                 | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | T7U                         |
| <a href="#">TL431AQPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 4D                          |
| TL431AQPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 4D                          |
| <a href="#">TL431BCD</a>      | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431B                       |
| TL431BCD.A                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431B                       |
| <a href="#">TL431BCDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T3GG, T3GJ, T3GU)          |
| TL431BCDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (T3GG, T3GJ, T3GU)          |
| <a href="#">TL431BCDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T3GG, T3GJ, T3GU)          |
| TL431BCDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (T3GG, T3GJ, T3GU)          |
| <a href="#">TL431BCDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T3G3, T3GG, T3GS,<br>T3GU) |
| TL431BCDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (T3G3, T3GG, T3GS,<br>T3GU) |
| <a href="#">TL431BCDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T3G3                        |
| TL431BCDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T3G3                        |
| <a href="#">TL431BCDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T3G3, T3GG, T3GS,<br>T3GU) |
| TL431BCDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (T3G3, T3GG, T3GS,<br>T3GU) |
| <a href="#">TL431BCDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T3G3                        |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)      |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|--------------------------|
| TL431BCDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T3G3                     |
| <a href="#">TL431BCDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | T2U                      |
| TL431BCDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | T2U                      |
| <a href="#">TL431BCDCKT</a>   | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | T2U                      |
| TL431BCDCKT.A                 | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | T2U                      |
| TL431BCDE4                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | -           | Call TI                              | Call TI                           | 0 to 70      |                          |
| <a href="#">TL431BCDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431B                    |
| TL431BCDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T431B                    |
| <a href="#">TL431BCLP</a>     | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | T431B                    |
| TL431BCLP.A                   | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | T431B                    |
| <a href="#">TL431BCLPR</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | T431B                    |
| TL431BCLPR.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70      | T431B                    |
| <a href="#">TL431BCPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 4C                       |
| TL431BCPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 4C                       |
| <a href="#">TL431BID</a>      | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | Z431B                    |
| TL431BID.A                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | Z431B                    |
| <a href="#">TL431BIDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3FG, T3FJ, T3FU)       |
| TL431BIDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (T3FG, T3FJ, T3FU)       |
| <a href="#">TL431BIDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3FG, T3FJ, T3FU)       |
| TL431BIDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (T3FG, T3FJ, T3FU)       |
| <a href="#">TL431BIDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3F3, T3FG, T3FS, T3FU) |
| TL431BIDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T3F3, T3FG, T3FS, T3FU) |
| <a href="#">TL431BIDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T3F3                     |
| TL431BIDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T3F3                     |
| <a href="#">TL431BIDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3F3, T3FG, T3FS, T3FU) |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)      |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|--------------------------|
| TL431BIDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T3F3, T3FG, T3FS, T3FU) |
| <a href="#">TL431BIDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T3F3                     |
| TL431BIDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T3F3                     |
| <a href="#">TL431BIDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | T3U                      |
| TL431BIDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | T3U                      |
| <a href="#">TL431BIDCKT</a>   | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | T3U                      |
| TL431BIDCKT.A                 | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | T3U                      |
| TL431BIDE4                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | -           | Call TI                              | Call TI                           | -40 to 85    |                          |
| TL431BIDG4                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | -           | Call TI                              | Call TI                           | -40 to 85    |                          |
| <a href="#">TL431BIDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | Z431B                    |
| TL431BIDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | Z431B                    |
| <a href="#">TL431BIDRG4</a>   | Obsolete      | Production           | SOIC (D)   8     | -                     | -           | Call TI                              | Call TI                           | -40 to 85    | Z431B                    |
| <a href="#">TL431BILP</a>     | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | Z431B                    |
| TL431BILP.A                   | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | Z431B                    |
| <a href="#">TL431BILPR</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | Z431B                    |
| TL431BILPR.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | Z431B                    |
| <a href="#">TL431BIP</a>      | Obsolete      | Production           | PDIP (P)   8     | -                     | -           | Call TI                              | Call TI                           | -40 to 85    | TL431BIP                 |
| <a href="#">TL431BIPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 4I                       |
| TL431BIPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 4I                       |
| <a href="#">TL431BQD</a>      | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431BQ                   |
| TL431BQD.A                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431BQ                   |
| <a href="#">TL431BQDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (T3HJ, T3HU)             |
| TL431BQDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (T3HJ, T3HU)             |
| <a href="#">TL431BQDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (T3HJ, T3HU)             |
| TL431BQDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (T3HJ, T3HU)             |
| <a href="#">TL431BQDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T3H3, T3HG, T3HS, T3HU) |
| TL431BQDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T3H3, T3HG, T3HS, T3HU) |
| <a href="#">TL431BQDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T3HS                     |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6) |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|---------------------|
| TL431BQDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T3HS                |
| <a href="#">TL431BQDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T3HG, T3HS, T3HU)  |
| TL431BQDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T3HG, T3HS, T3HU)  |
| <a href="#">TL431BQDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T3HS                |
| TL431BQDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T3HS                |
| <a href="#">TL431BQDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | T8U                 |
| TL431BQDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | T8U                 |
| <a href="#">TL431BQDCKT</a>   | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | T8U                 |
| TL431BQDCKT.A                 | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | T8U                 |
| TL431BQDE4                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | -           | Call TI                              | Call TI                           | -40 to 125   |                     |
| <a href="#">TL431BQDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431BQ              |
| TL431BQDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431BQ              |
| TL431BQDRG4                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | -           | Call TI                              | Call TI                           | -40 to 125   |                     |
| <a href="#">TL431BQLP</a>     | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 125   | T431BQ              |
| TL431BQLP.A                   | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 125   | T431BQ              |
| <a href="#">TL431BQLPM</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 125   | T431BQ              |
| TL431BQLPM.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 125   | T431BQ              |
| <a href="#">TL431BQLPR</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 125   | T431BQ              |
| TL431BQLPR.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 125   | T431BQ              |
| <a href="#">TL431BQPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 3H                  |
| TL431BQPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 3H                  |
| <a href="#">TL431CD</a>       | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TL431C              |
| TL431CD.A                     | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TL431C              |
| <a href="#">TL431CDBVR</a>    | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T3CG, T3CJ, T3CS)  |
| TL431CDBVR.A                  | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (T3CG, T3CJ, T3CS)  |
| <a href="#">TL431CDBVT</a>    | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T3CG, T3CJ, T3CS)  |

| Orderable part number        | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C)   | Part marking<br>(6)      |
|------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|----------------|--------------------------|
| TL431CDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70        | (T3CG, T3CJ, T3CS)       |
| <a href="#">TL431CDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70        | (T3C3, T3CG, T3CS, T3CU) |
| TL431CDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | (T3C3, T3CG, T3CS, T3CU) |
| <a href="#">TL431CDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | T3C3                     |
| TL431CDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | T3C3                     |
| <a href="#">TL431CDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70        | (T3CG, T3CS, T3CU)       |
| TL431CDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | (T3CG, T3CS, T3CU)       |
| <a href="#">TL431CDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | 0 to 70        | T3CS                     |
| TL431CDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | T3CS                     |
| TL431CDG4                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | -           | Call TI                              | Call TI                           | 0 to 70        |                          |
| <a href="#">TL431CDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | TL431C                   |
| TL431CDR-J                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | TL431C                   |
| TL431CDR-J.A                 | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | TL431C                   |
| TL431CDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70        | TL431C                   |
| <a href="#">TL431CDRG4</a>   | Obsolete      | Production           | SOIC (D)   8     | -                     | -           | Call TI                              | Call TI                           | 0 to 70        | TL431C                   |
| <a href="#">TL431CLP</a>     | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70        | TL431C                   |
| <a href="#">TL431CLP-Z</a>   | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | -              | TL431C                   |
| TL431CLP-Z.A                 | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | See TL431CLP-Z | TL431C                   |
| TL431CLP.A                   | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70        | TL431C                   |
| <a href="#">TL431CLPM</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70        | TL431C                   |
| TL431CLPM.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   AMMO           | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70        | TL431C                   |
| <a href="#">TL431CLPR</a>    | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70        | TL431C                   |
| TL431CLPR.A                  | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | 0 to 70        | TL431C                   |
| <a href="#">TL431CPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70        | 43                       |
| TL431CPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70        | 43                       |
| <a href="#">TL431CPKE6</a>   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SNBI                                 | Level-1-260C-UNLIM                | 0 to 70        | 43                       |
| TL431CPKE6.A                 | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SNBI                                 | Level-1-260C-UNLIM                | 0 to 70        | 43                       |

| Orderable part number | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)         |
|-----------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|-----------------------------|
| TL431CPSR             | Obsolete      | Production           | SO (PS)   8      | -                     | -           | Call TI                              | Call TI                           | 0 to 70      | T431                        |
| TL431ID               | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TL431I                      |
| TL431ID.A             | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TL431I                      |
| TL431IDBVR            | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3IG, T3IJ, T3IS)          |
| TL431IDBVR.A          | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (T3IG, T3IJ, T3IS)          |
| TL431IDBVT            | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T3IG, T3IJ, T3IU)          |
| TL431IDBVT.A          | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (T3IG, T3IJ, T3IU)          |
| TL431IDBZR            | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 85    | (T3I3, T3IG, T3IS,<br>T3IU) |
| TL431IDBZR.A          | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T3I3, T3IG, T3IS,<br>T3IU) |
| TL431IDBZRG4          | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 85    | T3IS                        |
| TL431IDBZRG4.A        | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T3IS                        |
| TL431IDBZT            | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 85    | (T3IG, T3IS, T3IU)          |
| TL431IDBZT.A          | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T3IG, T3IS, T3IU)          |
| TL431IDBZTG4          | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 85    | T3IS                        |
| TL431IDBZTG4.A        | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T3IS                        |
| TL431IDR              | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TL431I                      |
| TL431IDR.A            | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | TL431I                      |
| TL431IDRG4            | Obsolete      | Production           | SOIC (D)   8     | -                     | -           | Call TI                              | Call TI                           | -40 to 85    | TL431I                      |
| TL431ILP              | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431I                      |
| TL431ILP.A            | Active        | Production           | TO-92 (LP)   3   | 1000   BULK           | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431I                      |
| TL431ILPR             | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431I                      |
| TL431ILPR.A           | Active        | Production           | TO-92 (LP)   3   | 2000   LARGE T&R      | Yes         | SN                                   | N/A for Pkg Type                  | -40 to 85    | TL431I                      |
| TL431IP               | Obsolete      | Production           | PDIP (P)   8     | -                     | -           | Call TI                              | Call TI                           | -40 to 85    | TL431IP                     |
| TL431IPK              | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 3I                          |
| TL431IPK.A            | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 3I                          |

| Orderable part number        | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)         |
|------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|-----------------------------|
| <a href="#">TL431IPK3</a>    | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SNBI                                 | Level-1-260C-UNLIM                | -40 to 85    | 3I                          |
| TL431IPK3.A                  | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SNBI                                 | Level-1-260C-UNLIM                | -40 to 85    | 3I                          |
| <a href="#">TL431QD</a>      | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431Q                       |
| TL431QD.A                    | Active        | Production           | SOIC (D)   8     | 75   TUBE             | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431Q                       |
| <a href="#">TL431QDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (T3QG, T3QJ, T3QU)          |
| TL431QDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (T3QG, T3QJ, T3QU)          |
| <a href="#">TL431QDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (T3QG, T3QJ, T3QU)          |
| TL431QDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (T3QG, T3QJ, T3QU)          |
| <a href="#">TL431QDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T3Q3, T3QG, T3QS,<br>T3QU) |
| TL431QDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T3Q3, T3QG, T3QS,<br>T3QU) |
| <a href="#">TL431QDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T3QS                        |
| TL431QDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T3QS                        |
| <a href="#">TL431QDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T3QG, T3QS, T3QU)          |
| TL431QDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T3QG, T3QS, T3QU)          |
| <a href="#">TL431QDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T3QS                        |
| TL431QDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T3QS                        |
| <a href="#">TL431QDCKR</a>   | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | T6U                         |
| TL431QDCKR.A                 | Active        | Production           | SC70 (DCK)   6   | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | T6U                         |
| <a href="#">TL431QDCKT</a>   | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | T6U                         |
| TL431QDCKT.A                 | Active        | Production           | SC70 (DCK)   6   | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | T6U                         |
| <a href="#">TL431QDR</a>     | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431Q                       |
| TL431QDR.A                   | Active        | Production           | SOIC (D)   8     | 2500   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T431Q                       |
| <a href="#">TL431QPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 3Q                          |
| TL431QPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 3Q                          |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)         |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|-----------------------------|
| <a href="#">TL432ACDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T4BG, T4BJ, T4BU)          |
| TL432ACDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (T4BG, T4BJ, T4BU)          |
| <a href="#">TL432ACDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | 0 to 70      | (T4B3, T4BG, T4BS,<br>T4BU) |
| TL432ACDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (T4B3, T4BG, T4BS,<br>T4BU) |
| <a href="#">TL432ACDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | 0 to 70      | T4BS                        |
| TL432ACDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T4BS                        |
| <a href="#">TL432ACDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | 0 to 70      | (T4BG, T4BS, T4BU)          |
| TL432ACDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (T4BG, T4BS, T4BU)          |
| <a href="#">TL432ACDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | 0 to 70      | T4BS                        |
| TL432ACDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T4BS                        |
| <a href="#">TL432AIDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T4AG, T4AJ, T4AU)          |
| TL432AIDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (T4AG, T4AJ, T4AU)          |
| <a href="#">TL432AIDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T4A3, T4AG, T4AS,<br>T4AU) |
| TL432AIDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T4A3, T4AG, T4AS,<br>T4AU) |
| <a href="#">TL432AIDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4A3                        |
| TL432AIDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4A3                        |
| <a href="#">TL432AIDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T4A3, T4AG, T4AS,<br>T4AU) |
| TL432AIDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T4A3, T4AG, T4AS,<br>T4AU) |
| <a href="#">TL432AIDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4A3                        |
| TL432AIDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4A3                        |
| <a href="#">TL432AIPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 2E                          |
| TL432AIPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 2E                          |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)         |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|-----------------------------|
| <a href="#">TL432AQDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (T4DJ, T4DU)                |
| TL432AQDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (T4DJ, T4DU)                |
| <a href="#">TL432AQDBVT</a>   | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 125   | (T4DJ, T4DU)                |
| TL432AQDBVT.A                 | Active        | Production           | SOT-23 (DBV)   5 | 250   SMALL T&R       | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 125   | (T4DJ, T4DU)                |
| <a href="#">TL432AQDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T4D3, T4DG, T4DS,<br>T4DU) |
| TL432AQDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T4D3, T4DG, T4DS,<br>T4DU) |
| <a href="#">TL432AQDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T4DS                        |
| TL432AQDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T4DS                        |
| <a href="#">TL432AQDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T4DG, T4DS, T4DU)          |
| TL432AQDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T4DG, T4DS, T4DU)          |
| <a href="#">TL432AQDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T4DS                        |
| TL432AQDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T4DS                        |
| <a href="#">TL432AQPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 2F                          |
| TL432AQPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 2F                          |
| <a href="#">TL432BCDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (TBCJ, TBCU)                |
| TL432BCDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (TBCJ, TBCU)                |
| <a href="#">TL432BCDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | 0 to 70      | (TBCG, TBCS, TBCU)          |
| TL432BCDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (TBCG, TBCS, TBCU)          |
| <a href="#">TL432BCDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | 0 to 70      | TBCS                        |
| TL432BCDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TBCS                        |
| <a href="#">TL432BCDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (TBCG, TBCS, TBCU)          |
| TL432BCDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (TBCG, TBCS, TBCU)          |
| <a href="#">TL432BCDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | 0 to 70      | TBCS                        |
| TL432BCDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | TBCS                        |
| <a href="#">TL432BCPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 2G                          |

| Orderable part number         | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6)      |
|-------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|--------------------------|
| TL432BCPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 2G                       |
| <a href="#">TL432BIDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T4F3, T4FG, T4FS, T4FU) |
| TL432BIDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T4F3, T4FG, T4FS, T4FU) |
| <a href="#">TL432BIDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4F3                     |
| TL432BIDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4F3                     |
| <a href="#">TL432BIDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T4F3, T4FG, T4FS, T4FU) |
| TL432BIDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T4F3, T4FG, T4FS, T4FU) |
| <a href="#">TL432BIDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4F3                     |
| TL432BIDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4F3                     |
| <a href="#">TL432BIPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 2H                       |
| TL432BIPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 2H                       |
| <a href="#">TL432BQDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | (T4H3, T4HS, T4HU)       |
| TL432BQDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T4H3, T4HS, T4HU)       |
| TL432BQDBZR1G4                | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T4H3                     |
| TL432BQDBZR1G4.A              | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T4H3                     |
| <a href="#">TL432BQPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 2J                       |
| TL432BQPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 2J                       |
| <a href="#">TL432CDBVR</a>    | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | 0 to 70      | (T4CG, T4CJ, T4CU)       |
| TL432CDBVR.A                  | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | 0 to 70      | (T4CG, T4CJ, T4CU)       |
| <a href="#">TL432CDBZR</a>    | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | 0 to 70      | (T4CG, T4CS, T4CU)       |
| TL432CDBZR.A                  | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | (T4CG, T4CS, T4CU)       |
| <a href="#">TL432CDBZRG4</a>  | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | 0 to 70      | T4CS                     |
| TL432CDBZRG4.A                | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | 0 to 70      | T4CS                     |

| Orderable part number        | Status<br>(1) | Material type<br>(2) | Package   Pins   | Package qty   Carrier | RoHS<br>(3) | Lead finish/<br>Ball material<br>(4) | MSL rating/<br>Peak reflow<br>(5) | Op temp (°C) | Part marking<br>(6) |
|------------------------------|---------------|----------------------|------------------|-----------------------|-------------|--------------------------------------|-----------------------------------|--------------|---------------------|
| <a href="#">TL432CPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 2A                  |
| TL432CPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | 0 to 70      | 2A                  |
| <a href="#">TL432IDBVR</a>   | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | NIPDAU   SN                          | Level-1-260C-UNLIM                | -40 to 85    | (T4IG, T4IJ, T4IU)  |
| TL432IDBVR.A                 | Active        | Production           | SOT-23 (DBV)   5 | 3000   LARGE T&R      | Yes         | SN                                   | Level-1-260C-UNLIM                | -40 to 85    | (T4IG, T4IJ, T4IU)  |
| <a href="#">TL432IDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 85    | (T4IG, T4IS, T4IU)  |
| TL432IDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T4IG, T4IS, T4IU)  |
| <a href="#">TL432IDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 85    | T4IS                |
| TL432IDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4IS                |
| <a href="#">TL432IDBZT</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 85    | (T4IG, T4IS, T4IU)  |
| TL432IDBZT.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | (T4IG, T4IS, T4IU)  |
| <a href="#">TL432IDBZTG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 85    | T4IS                |
| TL432IDBZTG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 250   SMALL T&R       | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 85    | T4IS                |
| <a href="#">TL432IPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 2B                  |
| TL432IPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 85    | 2B                  |
| <a href="#">TL432QDBZR</a>   | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   SN<br>  NIPDAUAG            | Level-1-260C-UNLIM                | -40 to 125   | (T4QG, T4QS, T4QU)  |
| TL432QDBZR.A                 | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | (T4QG, T4QS, T4QU)  |
| <a href="#">TL432QDBZRG4</a> | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU   NIPDAUAG                    | Level-1-260C-UNLIM                | -40 to 125   | T4QS                |
| TL432QDBZRG4.A               | Active        | Production           | SOT-23 (DBZ)   3 | 3000   LARGE T&R      | Yes         | NIPDAU                               | Level-1-260C-UNLIM                | -40 to 125   | T4QS                |
| <a href="#">TL432QPK</a>     | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 2C                  |
| TL432QPK.A                   | Active        | Production           | SOT-89 (PK)   3  | 1000   LARGE T&R      | Yes         | SN                                   | Level-2-260C-1 YEAR               | -40 to 125   | 2C                  |

(1) **Status:** For more details on status, see our [product life cycle](#).

(2) **Material type:** When designated, preproduction parts are prototypes/experimental devices, and are not yet approved or released for full production. Testing and final process, including without limitation quality assurance, reliability performance testing, and/or process qualification, may not yet be complete, and this item is subject to further changes or possible discontinuation. If available for ordering, purchases will be subject to an additional waiver at checkout, and are intended for early internal evaluation purposes only. These items are sold without warranties of any kind.

(3) **RoHS values:** Yes, No, RoHS Exempt. See the [TI RoHS Statement](#) for additional information and value definition.

(4) **Lead finish/Ball material:** Parts may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

(5) **MSL rating/Peak reflow:** The moisture sensitivity level ratings and peak solder (reflow) temperatures. In the event that a part has multiple moisture sensitivity ratings, only the lowest level per JEDEC standards is shown. Refer to the shipping label for the actual reflow temperature that will be used to mount the part to the printed circuit board.

(6) **Part marking:** There may be an additional marking, which relates to the logo, the lot trace code information, or the environmental category of the part.

Multiple part markings will be inside parentheses. Only one part marking contained in parentheses and separated by a "~" will appear on a part. If a line is indented then it is a continuation of the previous line and the two combined represent the entire part marking for that device.

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**OTHER QUALIFIED VERSIONS OF TL431, TL432 :**

- Automotive : [TL431-Q1](#), [TL432-Q1](#)

NOTE: Qualified Version Definitions:

- Automotive - Q100 devices qualified for high-reliability automotive applications targeting zero defects