



T064AB-LC Thru T310AB-LC  
T064BB-LC Thru T310BB-LC  
T064CB-LC Thru T310CB-LC

Low Capacitance Bi-Directional Surface Mount Thyristor Surge Protective Device

**(Pb)** Lead(Pb)-Free

Feature:

- \* Peak Off-State Voltage from 58 to 275 Volts
- \* Meet IEC61000-4-4 & -5 Industry Requirement
- \* Provides Protection in Accordance with FCC Part 68 , UL1459, Bellcore 1089, ITU-TK.20 & k.21

Mechanical Data

- \* Case: JEDEC DO214AA. Molded Plastic Over Glass Passivated Junction
- \* Terminal: Solder Plated, Solderable per MIL-STD-750, Method 2026
- \* Standard Packaging: 12mm tape(EIA STD RS-481)
- \* Weight: 0.093 gram

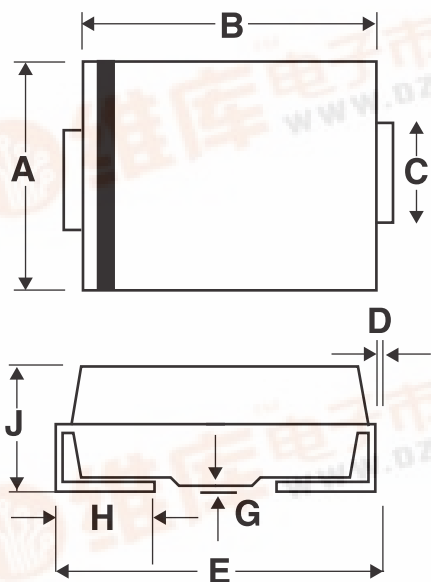
**I<sub>pp</sub>**  
**50 / 75 / 100 AMPERES**  
**V<sub>DRM</sub>**  
**58 - 275 VOLTS**



**SMB(DO-214AA)**

SMB Outline Dimension

Unit:mm



| SMB |      |      |
|-----|------|------|
| Dim | Min  | Max  |
| A   | 3.30 | 3.94 |
| B   | 4.06 | 4.80 |
| C   | 1.96 | 2.21 |
| D   | 0.15 | 0.31 |
| E   | 5.00 | 5.59 |
| G   | 0.10 | 0.20 |
| H   | 0.76 | 1.52 |
| J   | 2.00 | 2.62 |



## Maximum Ratings

| PART NUMBER | MARKING CODE | REPETITIVE PEAK OFF-STAGE VOLTAGE | SWITCHING VOLTAGE @100V/us | MINIMUM HOLDING CURRENT dl/dt=1A/ms | SWITCHING CURRENT | SURGE RATINGS IPP | ON-STAGE CURRENT | TYPICAL CAPACITANCE @2V,1MHz |
|-------------|--------------|-----------------------------------|----------------------------|-------------------------------------|-------------------|-------------------|------------------|------------------------------|
|             |              | V <sub>DRM</sub> VOLTS            | V <sub>s</sub> VOLTS       | I <sub>H</sub> mA                   | I <sub>s</sub> mA | 10*1000 μS Amps   | I <sub>T</sub> A | pF                           |
| T064AB-LC   | GCL          | 58                                | 77                         | 150                                 | 800               | 50                | 2.2              | 60                           |
| T072AB-LC   | GDL          | 65                                | 88                         | 150                                 | 800               | 50                | 2.2              | 60                           |
| T080AB-LC   | GEL          | 75                                | 98                         | 150                                 | 800               | 50                | 2.2              | 60                           |
| T110AB-LC   | GFL          | 90                                | 130                        | 150                                 | 800               | 50                | 2.2              | 60                           |
| T130AB-LC   | GGL          | 120                               | 160                        | 150                                 | 800               | 50                | 2.2              | 40                           |
| T150AB-LC   | GHL          | 140                               | 180                        | 150                                 | 800               | 50                | 2.2              | 40                           |
| T180AB-LC   | GIL          | 160                               | 220                        | 150                                 | 800               | 50                | 2.2              | 40                           |
| T230AB-LC   | GJL          | 190                               | 260                        | 150                                 | 800               | 50                | 2.2              | 30                           |
| T260AB-LC   | GKL          | 220                               | 300                        | 150                                 | 800               | 50                | 2.2              | 30                           |
| T310AB-LC   | GLL          | 275                               | 350                        | 150                                 | 800               | 50                | 2.2              | 30                           |
| T064BB-LC   | GPL          | 58                                | 77                         | 150                                 | 800               | 75                | 2.2              | 60                           |
| T072BB-LC   | GQL          | 65                                | 88                         | 150                                 | 800               | 75                | 2.2              | 60                           |
| T080BB-LC   | GRL          | 75                                | 98                         | 150                                 | 800               | 75                | 2.2              | 60                           |
| T110BB-LC   | GSL          | 90                                | 130                        | 150                                 | 800               | 75                | 2.2              | 60                           |
| T130BB-LC   | GTL          | 120                               | 160                        | 150                                 | 800               | 75                | 2.2              | 60                           |
| T150BB-LC   | GUL          | 140                               | 180                        | 150                                 | 800               | 75                | 2.2              | 40                           |
| T180BB-LC   | GVL          | 160                               | 220                        | 150                                 | 800               | 75                | 2.2              | 40                           |
| T230BB-LC   | GWL          | 190                               | 260                        | 150                                 | 800               | 75                | 2.2              | 30                           |
| T260BB-LC   | GXL          | 220                               | 300                        | 150                                 | 800               | 75                | 2.2              | 30                           |
| T310BB-LC   | GYL          | 275                               | 350                        | 150                                 | 800               | 75                | 2.2              | 30                           |
| T064CB-LC   | HCL          | 58                                | 77                         | 150                                 | 800               | 100               | 2.2              | 90                           |
| T072CB-LC   | HDL          | 65                                | 88                         | 150                                 | 800               | 100               | 2.2              | 90                           |
| T080CB-LC   | HEL          | 75                                | 98                         | 150                                 | 800               | 100               | 2.2              | 90                           |
| T110CB-LC   | HFL          | 90                                | 130                        | 150                                 | 800               | 100               | 2.2              | 90                           |
| T130CB-LC   | HGL          | 120                               | 160                        | 150                                 | 800               | 100               | 2.2              | 70                           |
| T150CB-LC   | HHL          | 140                               | 180                        | 150                                 | 800               | 100               | 2.2              | 70                           |
| T180CB-LC   | HIL          | 160                               | 220                        | 150                                 | 800               | 100               | 2.2              | 70                           |
| T230CB-LC   | HJL          | 190                               | 260                        | 150                                 | 800               | 100               | 2.2              | 60                           |
| T260CB-LC   | HKL          | 220                               | 300                        | 150                                 | 800               | 100               | 2.2              | 60                           |
| T310CB-LC   | HLL          | 275                               | 350                        | 150                                 | 800               | 100               | 2.2              | 60                           |

Maximum Off-State Current @V<sub>DRM</sub> : 5μA

Maximum On-State Voltage @I<sub>T</sub> : 5volts

## RATINGS AND CHARACTERICTIC CURVES (TA=25°C unless otherwise noted)

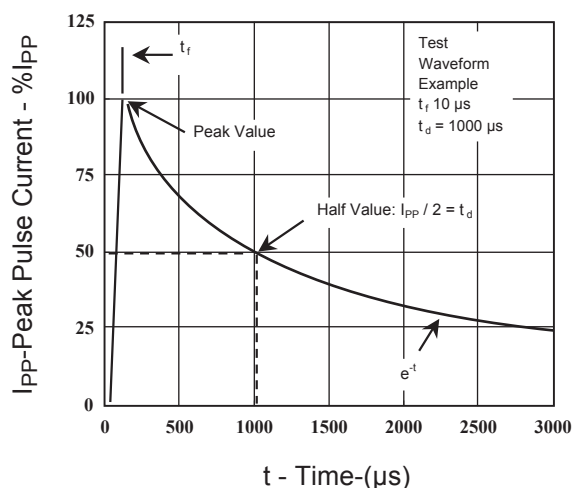


Fig.1 Pulse Wave Form Example

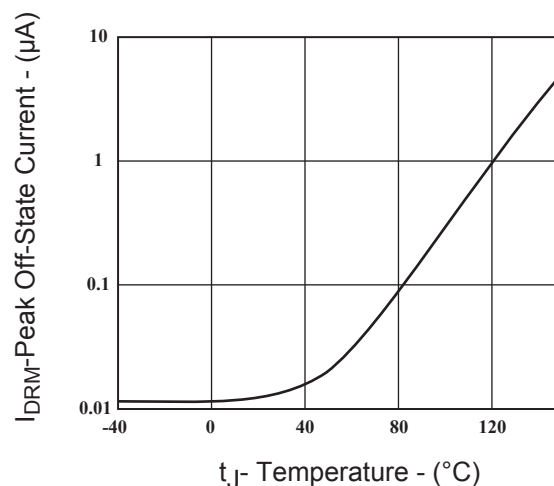


Fig.2 Typical Peak Off-State Current Vs Junction Temperature

## RATINGS AND CHARACTERICTIC CURVES (TA=25°C unless otherwise noted)

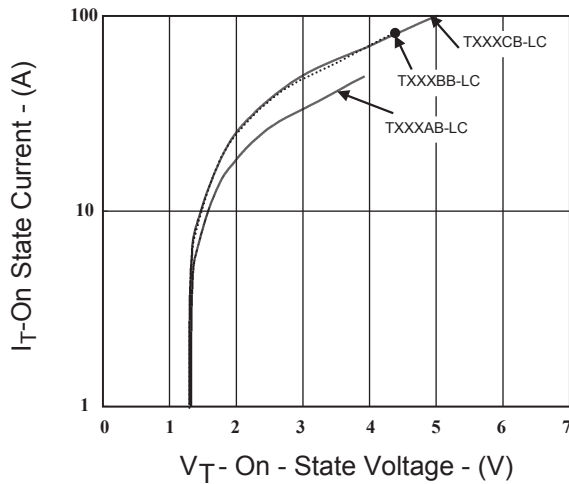


Fig.3 Typical On-State Current Vs On-State Voltage

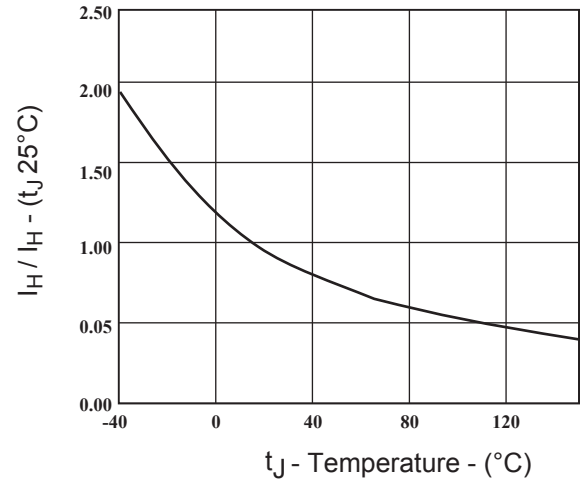


Fig.4 Typical Holding Current Vs Junction Temperature

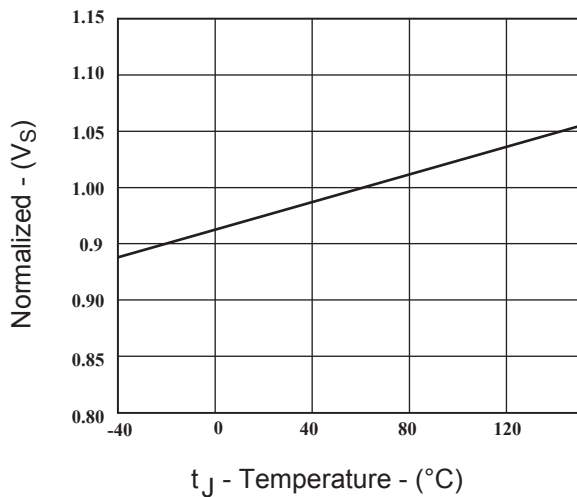


Fig.5 Typical normalized VS Vs Junction Temperature

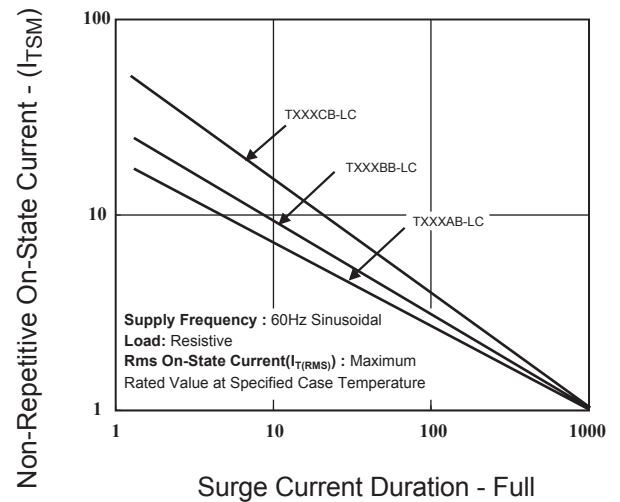


Fig.6 On-State Current Vs Surge Current

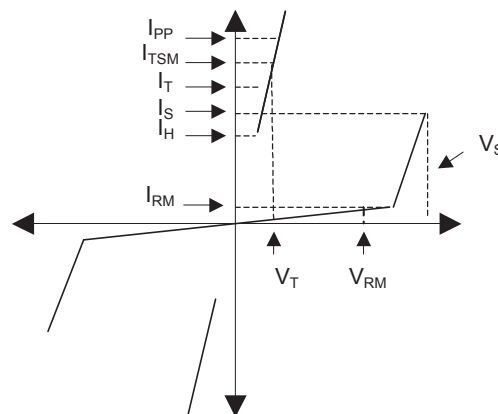


Fig.7 V - I Characteristics Curve