

## Low Capacitance Bi-Directional Surface Mount Thyristor Surge Protective Device

 Lead(Pb)-Free

### Feature:

- \* Peak Off-State Voltage from 90 to 360 Volts.
- \* Meet IEC61000-4-4 & -5 Industry Requirement.
- \* Provides Protection in Accordance with FCC Part 68, UL1459, Bellcore 1089, ITU-TK. 20 & K. 21.
- \* UL94V-0 Flammability Classification.
- \* ESD Protection >40 kilovolts.
- \* Low Capacitance for T1/E1 Trunk and Line Card Application.
- \* High Surge Current Capability.

### 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

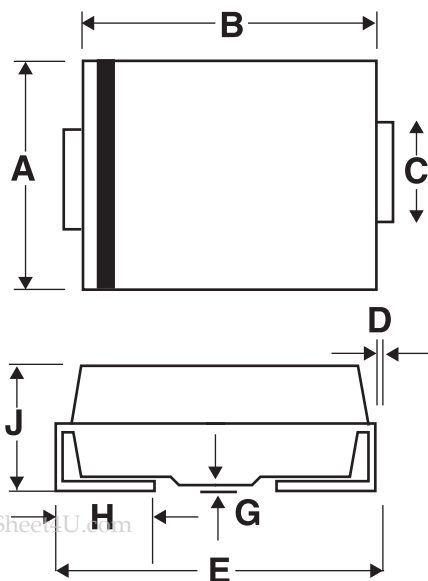
**V<sub>DRM</sub>**  
90-360 VOLTS



**SMB(DO-214AA)**

### SMB Outline Dimension

Unit:mm



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

## Maximum Ratings

PART NUMBER	MARKING CODE	REPETITIVE PEAK OFF-STAGE VOLTAGE $V_{DRM}$ VOLTS	SWITCHING VOLTAGE @100V/us $V_s$ VOLTS	MINIMUM HOLDING CURRENT $dI/dt=1A/ms$ $I_H$ mA	SWITCHING CURRENT $I_s$ mA	SURGE RATINGS $I_{PP}$ $10^*1000\mu S$ Amps	ON-STAGE CURRENT $I_T$ A	TYPICAL CAPACITANCE @2V,1MHz $\mu F$
T110AB-LC	GF	90	130	150	800	50	2.2	100
T130AB-LC	GG	120	160	150	800	50	2.2	80
T150AB-LC	GH	140	180	150	800	50	2.2	70
T180AB-LC	GI	160	220	150	800	50	2.2	70
T230AB-LC	GJ	190	260	150	800	50	2.2	50
T260AB-LC	GK	220	300	150	800	50	2.2	50
T310AB-LC	GL	275	350	150	800	50	2.2	40
T350AB-LC	GM	300	400	150	800	50	2.2	40
T400AB-LC	GO	360	450	150	800	50	2.2	40
T110BB-LC	GS	90	130	150	800	75	2.2	130
T130BB-LC	GT	120	160	150	800	75	2.2	120
T150BB-LC	GU	140	180	150	800	75	2.2	120
T180BB-LC	GV	160	220	150	800	75	2.2	100
T230BB-LC	GW	190	260	150	800	75	2.2	80
T260BB-LC	GX	220	300	150	800	75	2.2	80
T310BB-LC	GY	275	350	150	800	75	2.2	60
T350BB-LC	GZ	300	400	150	800	75	2.2	60
T400BB-LC	GN	360	400	150	800	75	2.2	60
T110CB-LC	HF	90	130	150	800	100	2.2	150
T130CB-LC	HG	120	160	150	800	100	2.2	140
T150CB-LC	HH	140	180	150	800	100	2.2	140
T180CB-LC	HI	160	220	150	800	100	2.2	125
T230CB-LC	HJ	190	260	150	800	100	2.2	100
T260CB-LC	HK	220	300	150	800	100	2.2	100
T310CB-LC	HL	275	350	150	800	100	2.2	80
T350CB-LC	HM	300	400	150	800	100	2.2	80
T400CB-LC	HS	360	450	150	800	100	2.2	80

Maximum Off-State Current @  $V_{DRM}$  :  $5\mu A$

Maximum On-State Voltage @  $I_T$  : 5volts

## RATINGS AND CHARACTERISTIC CURVES ( $T_A=25^\circ C$ unless otherwise noted)

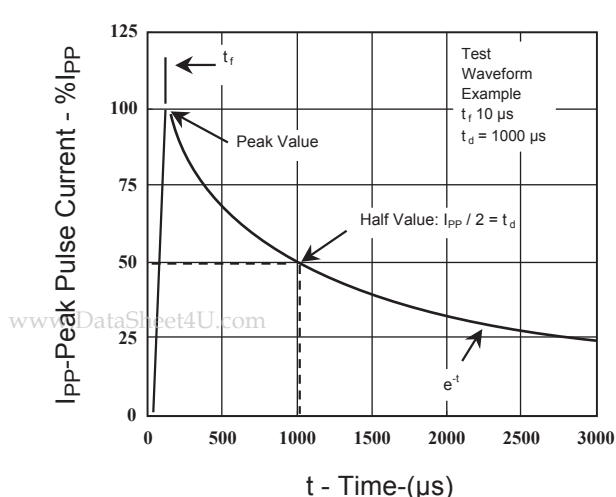


Fig.1 Pulse Wave Form Example

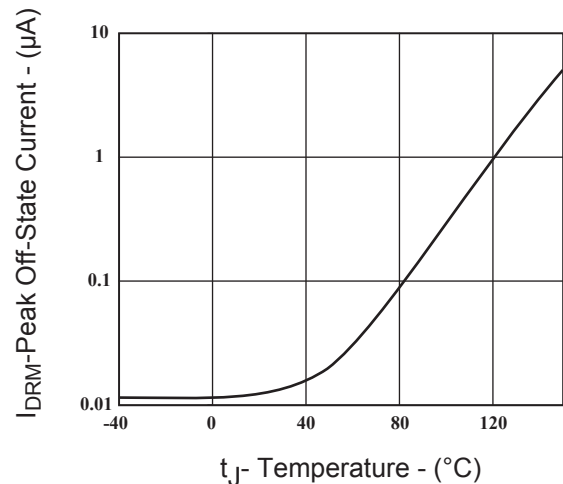


Fig.2 Typical Peak Off-State Current Vs Junction Temperature

**RATINGS AND CHARACTERISTIC CURVES** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

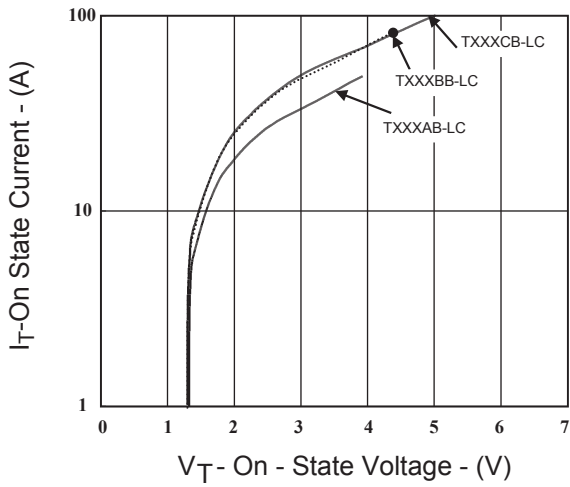


Fig.3 Typical On-State Current Vs On-State Voltage

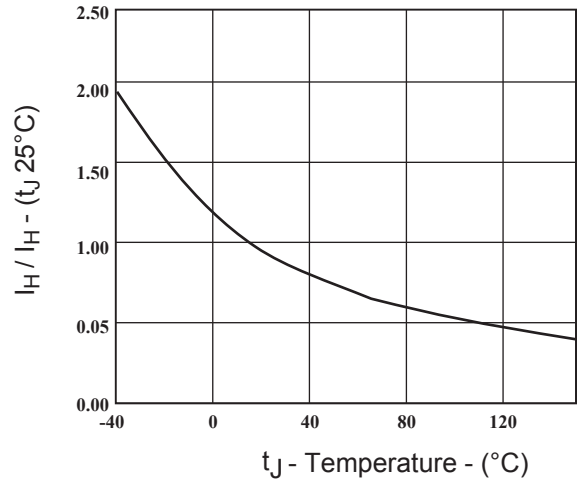


Fig.4 Typical Holding Current Vs Junction Temperature

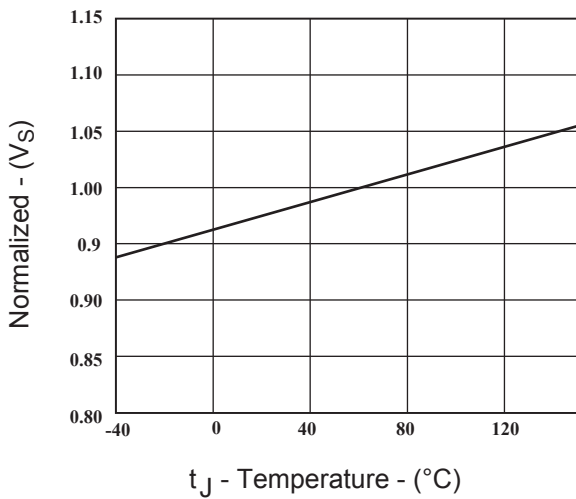


Fig.5 Typical normalized VS Vs Junction Temperature

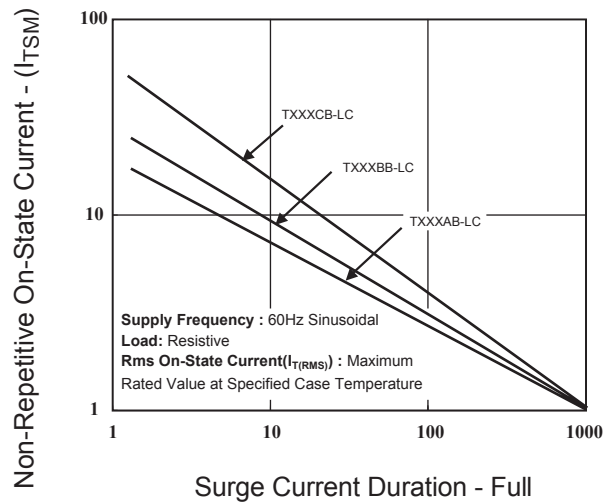


Fig.6 On-State Current Vs Surge Current

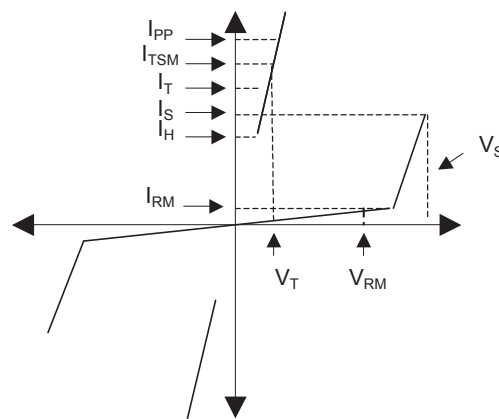


Fig.7 V - I Characteristics Curve