

FEATURES

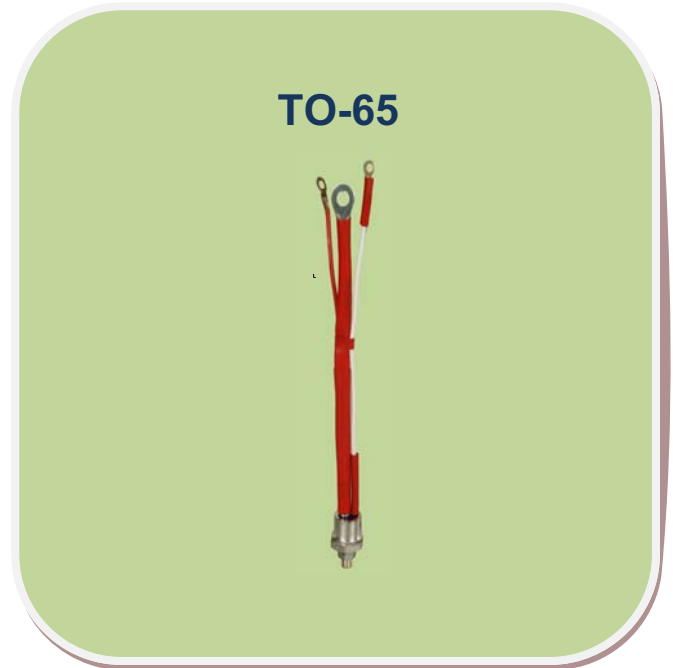
- Hermetic glass to metal seal
- High di/dt & dv/dt capabilities.
- Voltage grade upto 1600V

TYPICAL APPLICATIONS

- DC Motor control
- Controlled rectifiers
- AC Controllers

TECHNICAL DATA

DEVICE TYPE	V_{DRM}/V_{RRM} (V)	V_{RSM} (V)
T50B120	1200	1300
T50B160	1600	1700



SYMBOL	CONDITIONS	VALUES
I_{TAV}	Sin. 180; $T_{case} = 94\text{ }^{\circ}\text{C}$	50 amp.
I_{RMS}	$T_a = 45\text{ }^{\circ}\text{C}$	80 amp.
I_{TSM} I^2t	$T_{vj}=25\text{ }^{\circ}\text{C}$; 10ms $T_{vj}=25\text{ }^{\circ}\text{C}$	1200 amp. 7200 A ² S
I_{RRM}/I_{DRM}	$T_{vj}=25\text{ }^{\circ}\text{C}$ $T_{vj}=125\text{ }^{\circ}\text{C}$	3 mA 15 mA
V_T	$T_{vj}=25\text{ }^{\circ}\text{C}$ ($I_T=150\text{ Amp.}$); max	1.60 V
di/dt		100A/us
dv/dt		500V/us
I_{GT} V_{GT} I_H I_L	$T_{vj}=25\text{ }^{\circ}\text{C}$ $T_{vj}=25\text{ }^{\circ}\text{C}$ $T_{vj}=25\text{ }^{\circ}\text{C}$ Typical value $T_{vj}=25\text{ }^{\circ}\text{C}$ Typical value	250 mA 2.5 V 200 mA 400 mA
$R_{th(j-c)}$ $R_{th(c-h)}$ T_{vj} T_{stg}	Junction to case case to heat sink	0.4 $^{\circ}\text{C}/\text{W}$ 0.25 $^{\circ}\text{C}/\text{W}$ 125 $^{\circ}\text{C}$ 125 $^{\circ}\text{C}$
Mounting torque		4 Nm
Weight	Approx.	30 gm
Package Outline		B

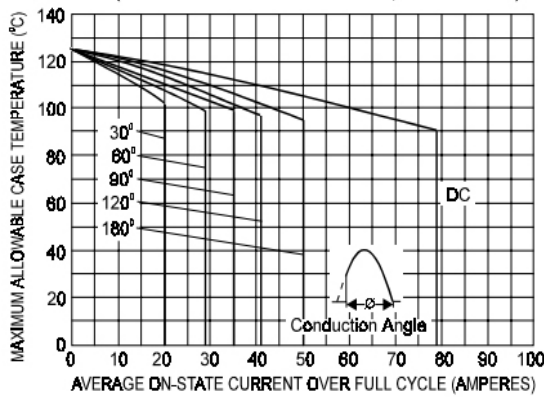


Fig. 3 - On-state Current Vs. Case Temperature (Sinusoidal Current Waveform, 50 to 400 Hz)

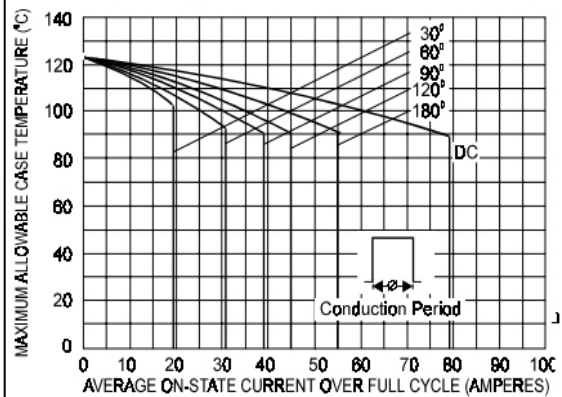


Fig. 4 - On-state Current Vs. Case Temperature (Rectangular Current Waveform, 50 to 400 Hz)

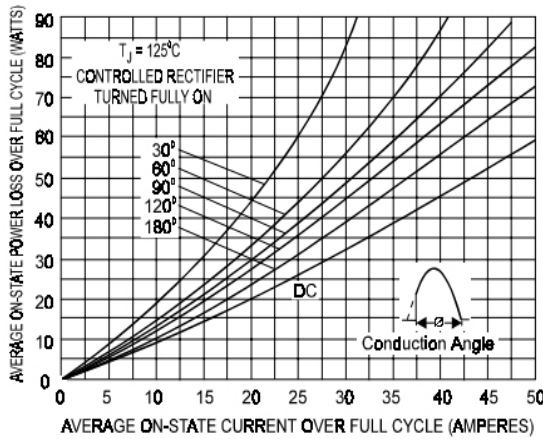


Fig. 7 - Maximum Low-Level On-state Power Loss Vs. Current (Sinusoidal Current Waveform)

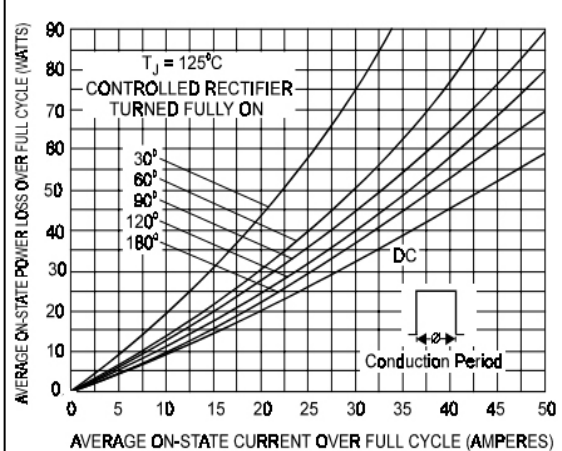


Fig. 8 - Maximum Low-Level On-state Power Loss Vs. Current (Rectangular Current Waveform)

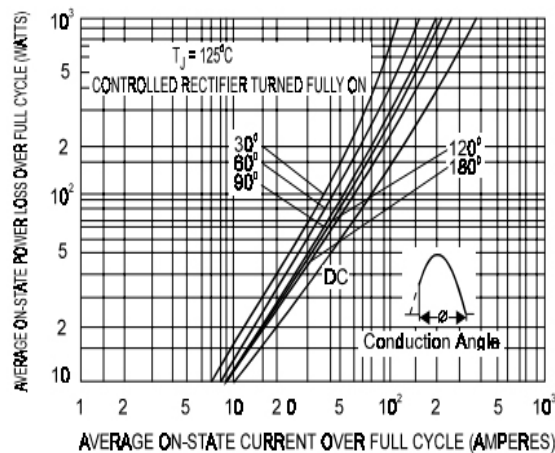


Fig. 11 - Maximum High-Level On-state Power Loss Vs. Current (Sinusoidal Current Waveform)

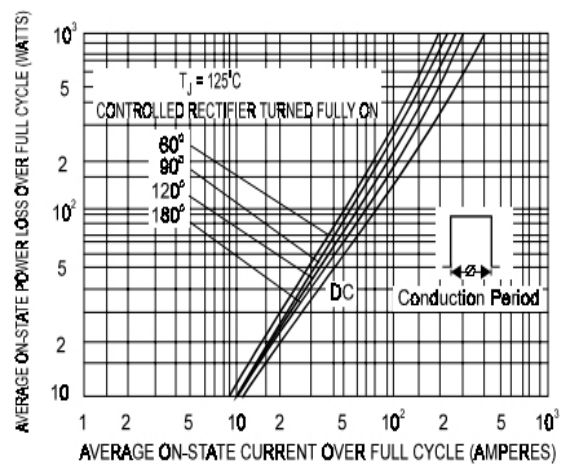


Fig. 12 - Maximum High-Level On-state Power Loss Vs. Current (Rectangular Current Waveform)

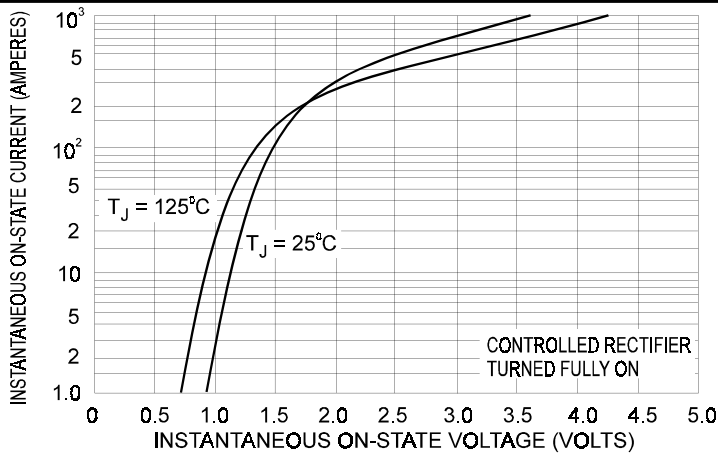


Fig. 13 - Maximum On-state Voltage Vs. Current

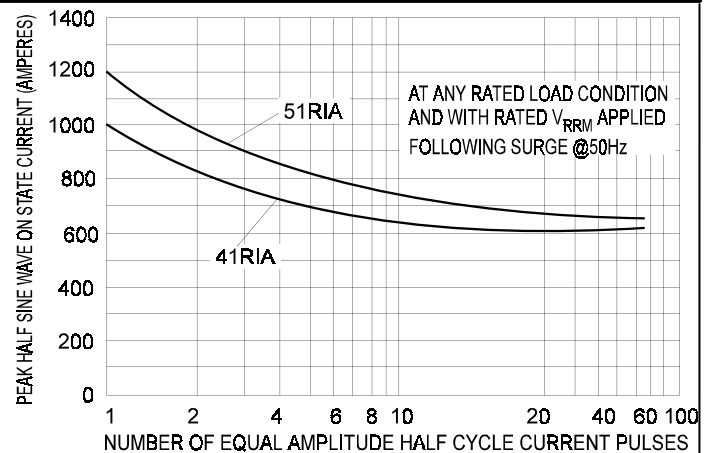


Fig. 14 - Maximum Non-Repetitive Surge Current Vs. Number of Current Pulses

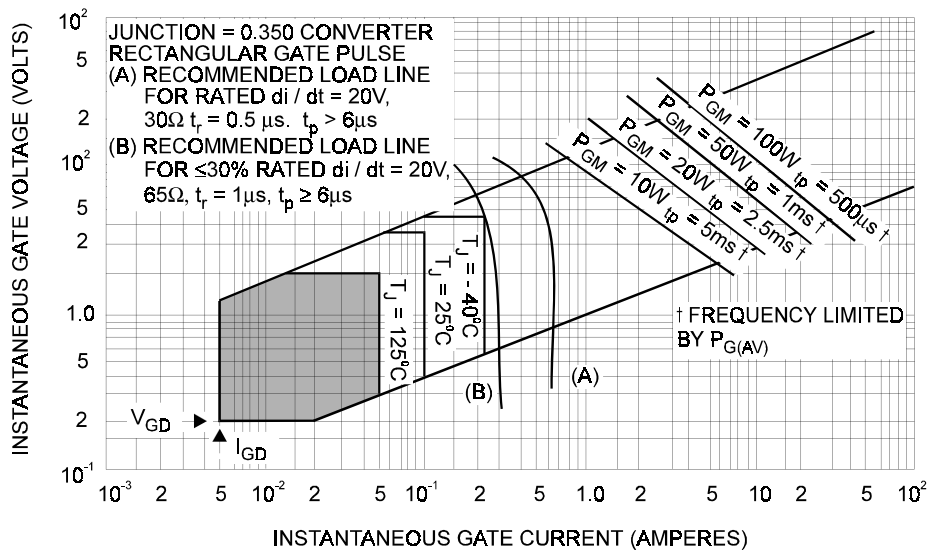


Fig. 15 - Gate Characteristics

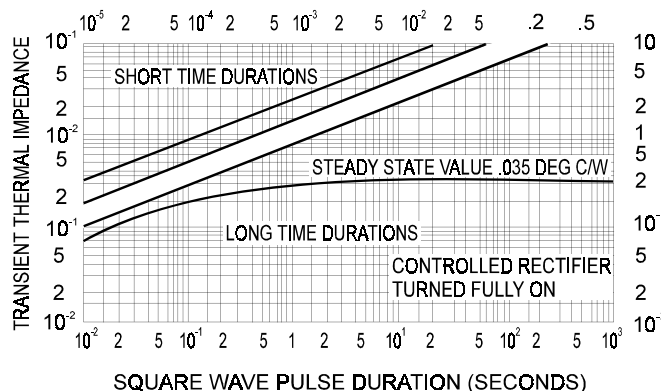
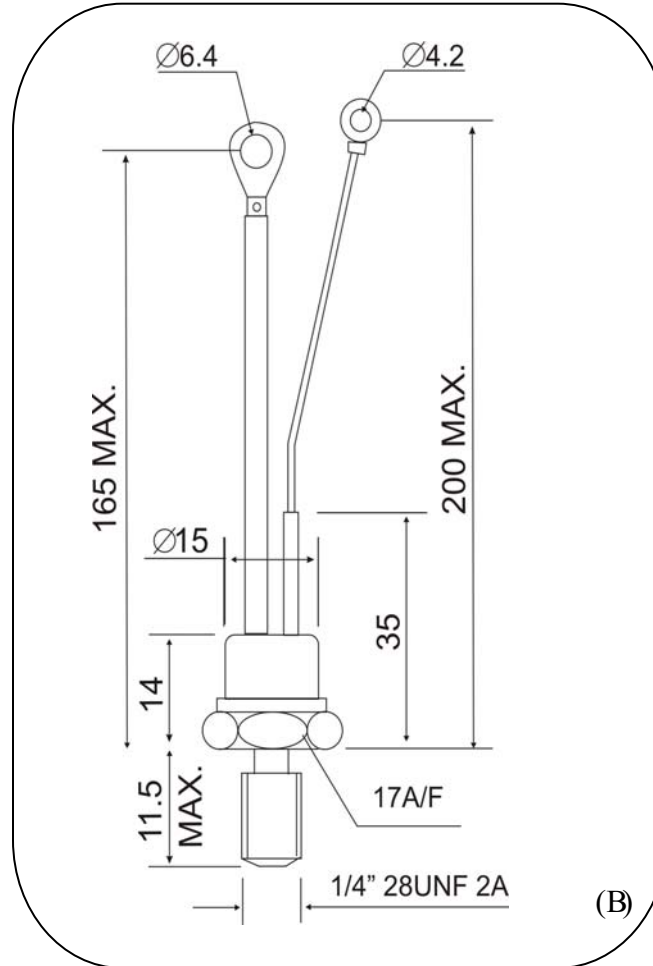


Fig. 16 - Maximum Transient Thermal Impedance, Junction To Case Vs Square Wave Pulse Duration

PACKAGE OUTLINE



All dimension are in mm .

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