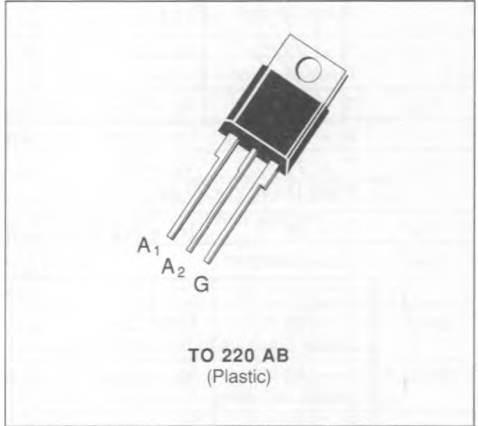




TRIACS

- GLASS PASSIVATED CHIP
- EXCELLENT $(dv/dt)_c > 10 \text{ V}/\mu\text{s}$
- I_{GT} SPECIFIED IN FOUR QUADRANTS
- INSULATING VOLTAGE 2500 V_{RMS}
- UL RECOGNIZED (E81734)



DESCRIPTION

New range suited for applications such as phase control and static switching.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit
$I_{T(RMS)}$	RMS on-state Current (360° conduction angle) $T_C = 80^\circ\text{C}$	16	A
I_{TSM}	Non Repetitive Surge Peak on-state Current (T_j initial = 25°C - Half sine wave)	$t = 8.3 \text{ ms}$	A
		$t = 10 \text{ ms}$	
I^2t	I^2t Value for Fusing $t = 10 \text{ ms}$	128	A^2s
di/dt	Critical Rate of Rise of on-state Current (1)	Repetitive $F = 50 \text{ Hz}$	$\text{A}/\mu\text{s}$
		Non Repetitive	
T_{stg} T_j	Storage and Operating Junction Temperature Range	-40 to 150 -40 to 125	$^\circ\text{C}$ $^\circ\text{C}$

Symbol	Parameter	BTA 16-					Unit
		200B	400B	600B	700B	800B	
V_{DRM}	Repetitive Peak off-state Voltage (2)	200	400	600	700	800	V

(1) $I_G = 1 \text{ A}$ $di_G/dt = 1 \text{ A}/\mu\text{s}$

(2) $T_j = 125^\circ\text{C}$.

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-a)}$	Junction to Ambient	60	$^\circ\text{C}/\text{W}$
$R_{th(j-c)} \text{ DC}$	Junction to Case for DC	3.33	$^\circ\text{C}/\text{W}$
$R_{th(j-c)} \text{ AC}$	Junction to Case for 360° Conduction Angle ($F = 50 \text{ Hz}$)	2.5	$^\circ\text{C}/\text{W}$

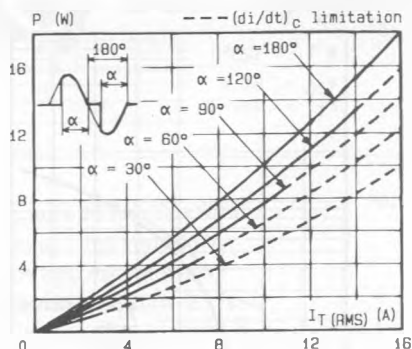


Fig. 1 - Maximum mean power dissipation versus RMS on-state current ($F = 60$ Hz).

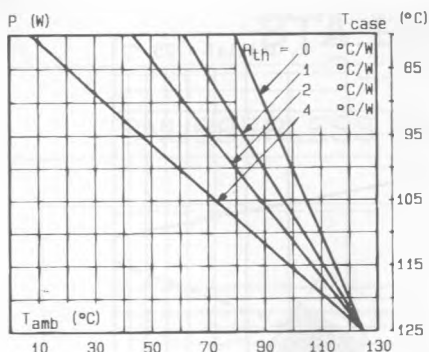


Fig. 2 - Correlation between maximum mean power dissipation and maximum allowable temperatures (T_{amb} and T_{case}) for different thermal resistances heatsink + contact.

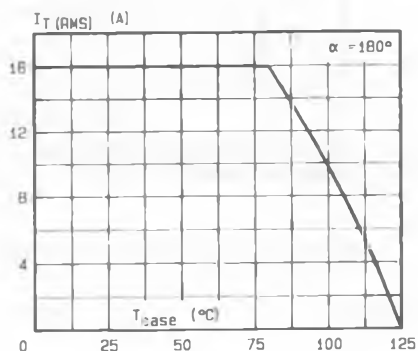


Fig. 3 - RMS on-state current versus case temperature.

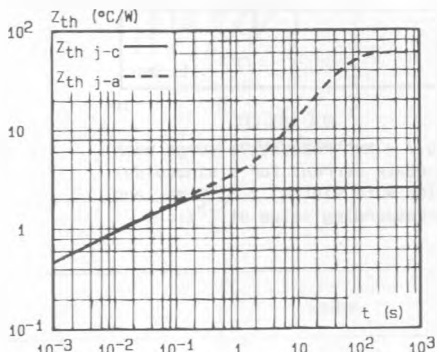


Fig. 4 - Thermal transient impedance junction to case and junction to ambient versus pulse duration.

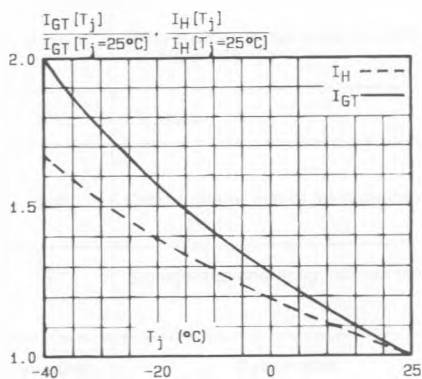


Fig. 5 - Relative variation of gate trigger current and holding current versus junction temperature.

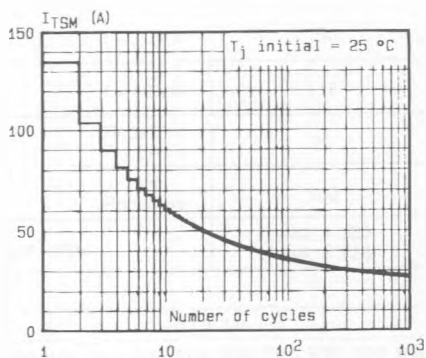


Fig. 6 - Non repetitive surge peak on-state current versus number of cycles.

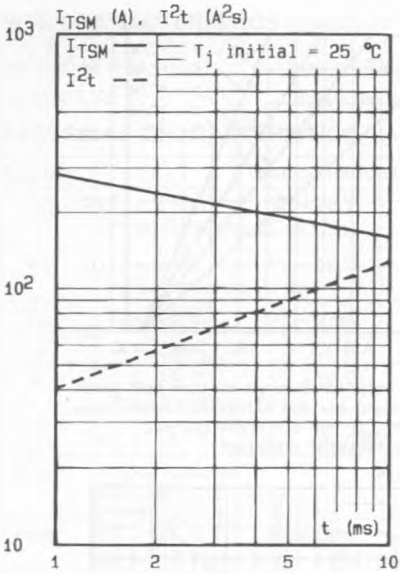


Fig.7 - Non repetitive surge peak on-state current for a sinusoidal pulse with width : $t \leq 10$ ms, and corresponding value of I^2t .

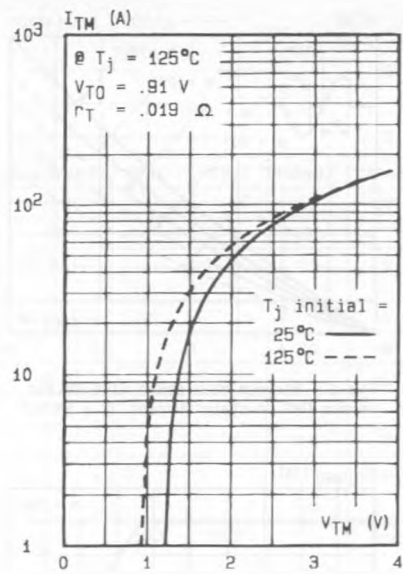


Fig.8 - On-state characteristics (maximum values).