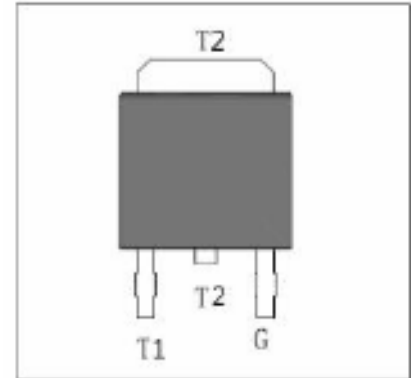


**Features:**

- \* Back multilayer metal electrode
- \* High temperature reliability
- \* Glass Passivated junction chips
- \* NPNPN Bi-direction Triac

**Application:**

Power tool ,moto speed controller, Vacuum cleaner,heating temperature controller, Solid state relay and phase control circuits.


**● ABSOLUTE MAXIMUM RATINGS**

Symbol	Absolute maximum ratings Parameters		Value	Unit
$I_{T(RMS)}$	<b>RMS on-state current</b>	$T_c=90^{\circ}C$	4	A
$I_{TSM}$	<b>Non repetitive surge peak on-state current</b>	$F=50HZ$ $t=20ms$	40	A
$I^2t$	<b><math>I^2t</math> value for fusing</b>	$t_p=10ms$	8	$A^2S$
$di/dt$	<b>Critical rate of rise of on-state current</b>	$T_j=125^{\circ}C$	50	A/us
$V_{DRM}/V_{RRM}$	<b>Non repetitive surge peak off-state voltage</b>	$T_j=25^{\circ}C$	600	V
$I_{GM}$	<b>Peak gate current</b>	$t_p=20us$ $T_j=125^{\circ}C$	4	A
$P_{G(AV)}$	<b>Average gate power dissipation</b>	$T_j=125^{\circ}C$	0.5	W
$T_{stg}$ $T_j$	<b>Storage junction temperature range</b> <b>Operating junction temperature range</b>		-40~+150 -40~+125	$^{\circ}C$

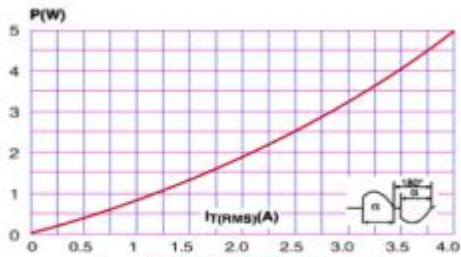
● **Electrical Characteristics(3 quadrant) (T<sub>j</sub>=25°C, unless otherwise specified)**

Symbol	Test Condition	Quadrant		Value	Unit
I <sub>GT</sub>	V <sub>D</sub> =12V R <sub>L</sub> =100Ω	I II III	MAX	5	mA
V <sub>GT</sub>			MAX	1.5	V
V <sub>GD</sub>	T <sub>j</sub> =125°C		MIN	0.20	V
I <sub>H</sub>	I <sub>T</sub> =0.5A		MAX	35	mA
I <sub>L</sub>	I <sub>G</sub> =1.2I <sub>GT</sub>		MAX	35	mA
dv/dt	V <sub>D</sub> =2/3V <sub>DRM</sub> T <sub>j</sub> =125°C		MIN	500	V/us

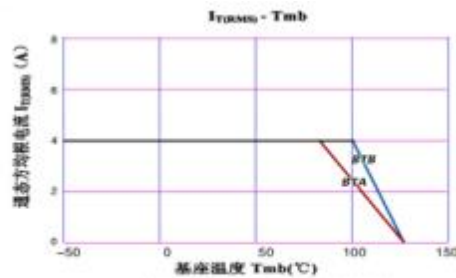
● **Static Characteristics**

Symbol	Test Condition		Value	Unit
V <sub>TM</sub>	I <sub>TM</sub> = 8 A	MAX	1.5	V
	TA=25°C			
V <sub>TO</sub>	T <sub>j</sub> =125°C	MAX	0.92	V
R <sub>d</sub>	T <sub>j</sub> =125°C	MAX	36.6	mΩ
I <sub>DRM</sub>	T <sub>j</sub> =25°C	MAX	5	uA
I <sub>RRM</sub>	T <sub>j</sub> =125°C		0.5	mA
R <sub>th(j-c)</sub>			1.75	°C/W

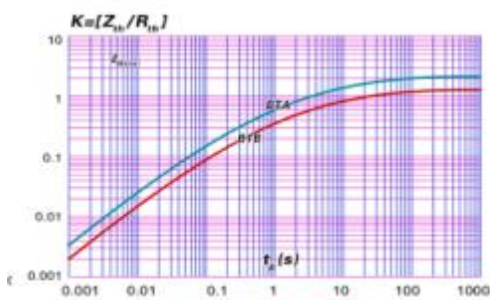
### Electrical Characteristic Curve



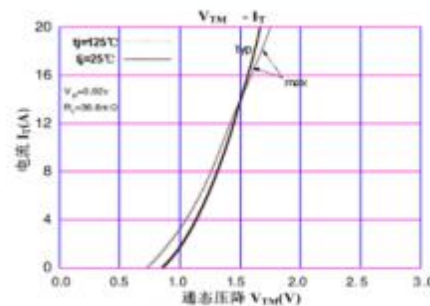
1、功耗与电流曲线 (180°C)



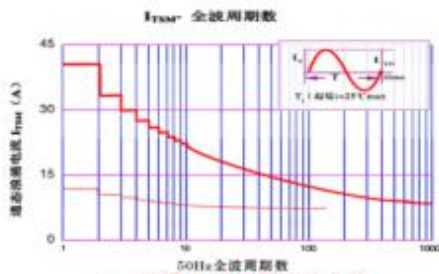
2、亮温与通态方均根电流曲线



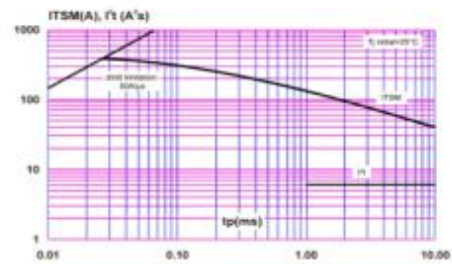
3、瞬态热阻曲线



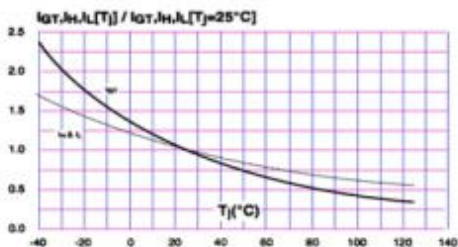
4、通态伏安特性曲线



5、浪涌电流与周波数曲线



6、 $I_{TSM}-t, I^2t-t$  曲线



7、门极触发特性曲线

● TO-252 Mechanical Dimension(in mm)

