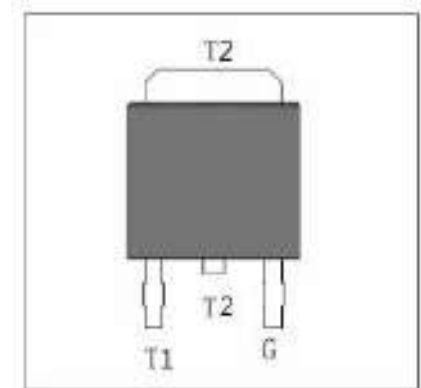


**Features:**

- \* 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**

Parameter	Symbol	Value	Unit
RMS on-state current(full sine wave) Tc=90°C	$I_{T(RMS)}$ Tc=90°C	4	A
Non repetitive surge peak on-state current(full cycle, Tj=25°C) F=50HZ tp=20ms	$I_{TSM}$ F=50HZ tp=20ms	40	A
I <sup>2</sup> t Value for fusing tp=10ms	$I^2t$ tp=10ms	8	A <sup>2</sup> S
Critical rate of rise of on-state current IG=2*IGT, tr<100ns, f=120Hz, Tj=125°C	di/dt Tj=125°C	50	A/us
Repetitive Peak Off-state Voltage Tj=25°C Repetitive Peak Reverse Voltage	$V_{DRM}/V_{RRM}$ Tj=25°C	600	V
Peak gate current tp=20us Tj=150°C	$I_{GM}$ tp=20us Tj=125°C	4	A
Average gate power dissipation Tj=150°C	$P_{G(AV)}$ Tj=125°C	0.5	W
Storage junction temperature range Operating junction temperature range	Tstg Tj	-40to+150 -40to+125	°C

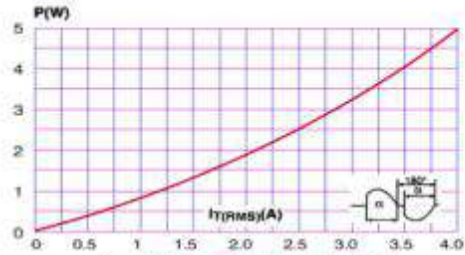
●Electrical Characteristics(4 quadrant) (Tj=25°C , unless otherwise specified)

Symbol	Test Condition	Quadrant		Value		Unit
				I II III	IV	
I <sub>GT</sub>	V <sub>D</sub> =12V R <sub>L</sub> =100Ω	I II III IV	MAX			mA
				5	10	
V <sub>GT</sub>			MAX	1.5		V
V <sub>GD</sub>	Tj=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> Tj=125°C		MIN	500		V/us

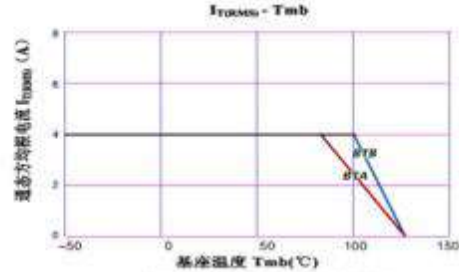
●Static Characteristics

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

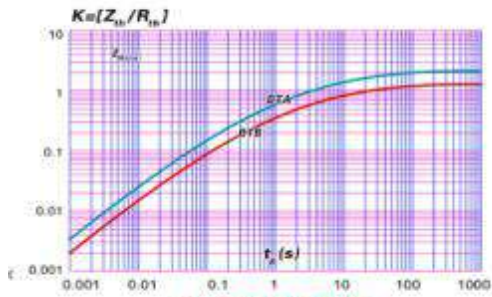
### Electrical Characteristic Curve



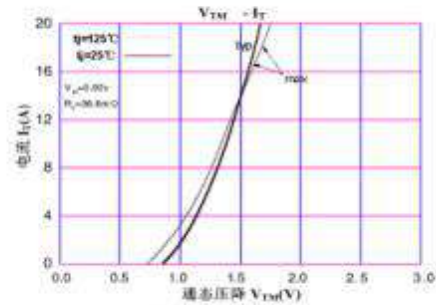
1、功耗与电流曲线 (180°C)



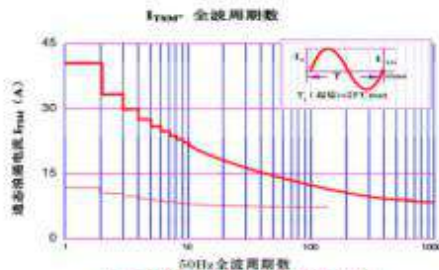
2、壳温与通态方均根电流曲线



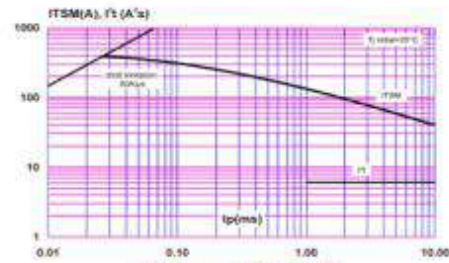
3、瞬态热阻曲线



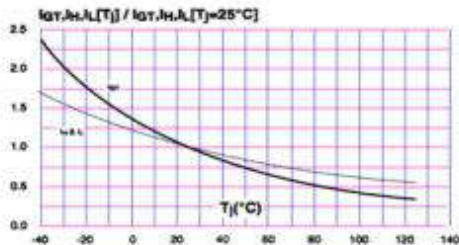
4、通态伏安特性曲线



5、浪涌电流与周波数曲线



6、 $I_{TSM}^2-t$  曲线



7、门极触发特性曲线

●TO-252 Mechanical Dimension(in mm)

