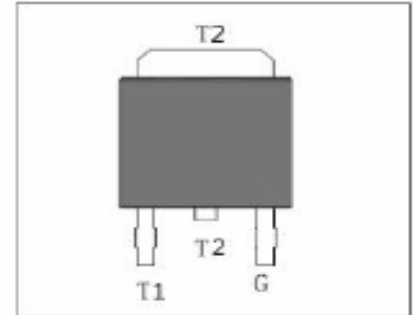


Features:

- * 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.



TO-252

●ABSOLUTE MAXIMUM RATINGS

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

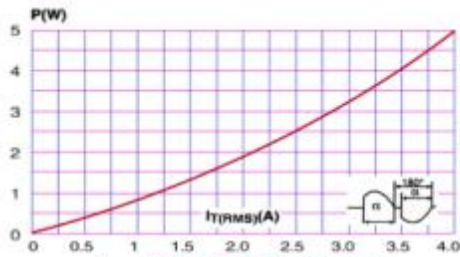
●Electrical Characteristics(4 quadrant) (Tj=25℃ , unless otherwise specified)

Symbol	Test Condition	Quadrant		Value		Unit
I _{GT}	V _D =12V R _L =100Ω	I II III IV	MAX	I II III	IV	mA
				10	25	
V _{GT}			MAX	1.5		V
V _{GD}	Tj=125℃		MIN	0.20		V
I _H	I _T =0.5A		MAX	35		mA
I _L	I _G =1.2I _{GT}		MAX	35		mA
dv/dt	V _D =2/3V _{DRM} Tj=125℃		MIN	500		V/us

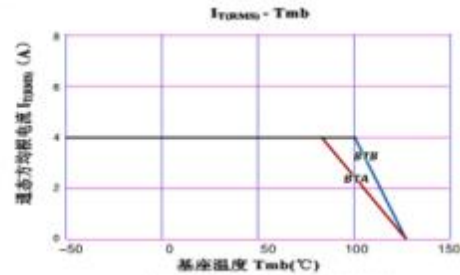
●Static Characteristics

Symbol	Test Condition		Value	Unit
V _{TM}	I _{TM} = 8A T _j =25°C	MAX	1.5	V
V _{TO}	T _j =125°C	MAX	0.92	V
R _d	T _j =125°C	MAX	36.6	mΩ
I _{DRM} I _{RRM}	T _j =25°C T _j =125°C	MAX	5	uA
			0.5	mA
R _{th(j-c)}			1.75	°C/W

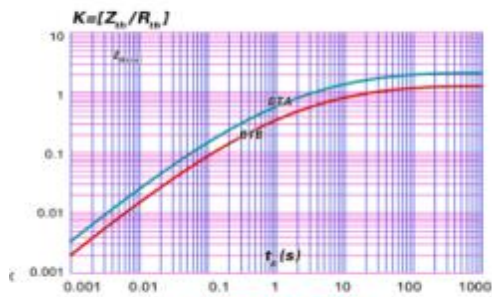
Electrical Characteristic Curve



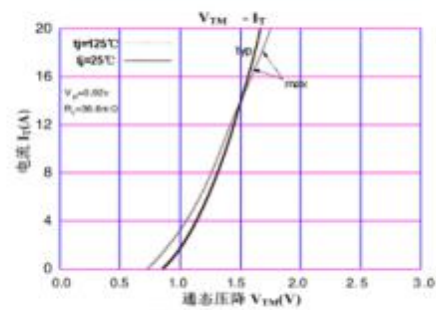
1、功耗与电流曲线 (180°C)



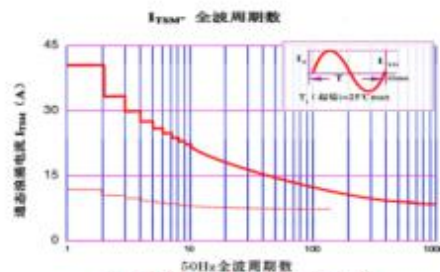
2、壳温与通态方均根电流曲线



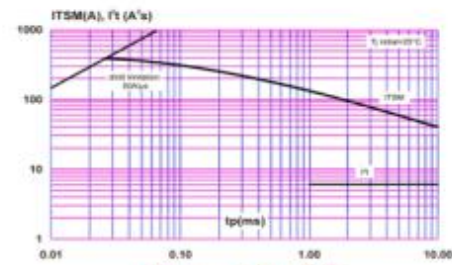
3、瞬态热阻曲线



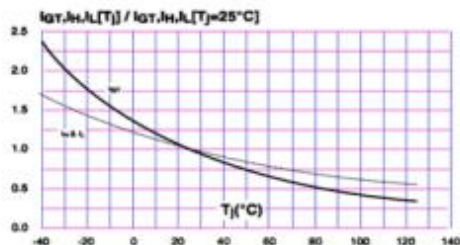
4、通态伏安特性曲线



5、浪涌电流与周波数曲线



6、 $I_{TSM}-I^2t-t$ 曲线



7、门极触发特性曲线

●TO-252 Mechanical Dimension(in mm)

