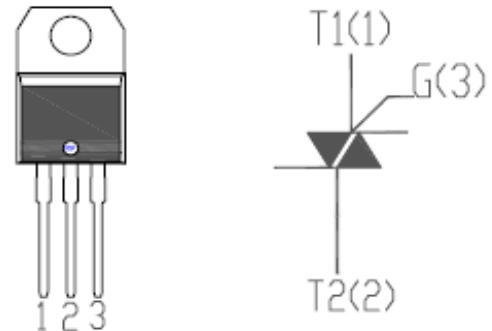


● Features:

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



Application:

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

● Limiting Values

Symbol	Test Conditions	Value	Unit
$I_{T(RMS)}$	BTA10-600B $T_c=80^{\circ}C$	10	A
I_{TSM}	F=50HZ $t=20ms$	105	A
I^2t	$t_p=10ms$	55	A ² S
di/dt	$T_j=125^{\circ}C$	50	A/us
V_{DRM}/V_{RRM}	$T_j=25^{\circ}C$	600	V
I_{GM}	$t_p=20us$ $T_j=125^{\circ}C$	4	A
$P_{G(AV)}$	$T_j=125^{\circ}C$	1	W
T_{stg} T_j	$-40^{\circ}C \text{ --- } +150^{\circ}C$ $-40^{\circ}C \text{ --- } +125^{\circ}C$		$^{\circ}C$

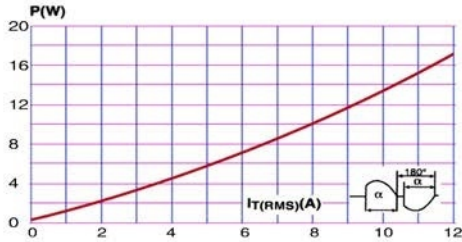
● **Electrical Characteristics**($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Test Conditions	Quadrant		Value	Unit	
I_{GT}	$V_D=12V$ $R_L=100\Omega$	I II III IV	MAX	I -II-III	IV	mA
				≤ 50	≤ 100	
V_{GT}	MAX		1.3		V	
V_{GD}			T _j =125°C	MIN	0.2	V
I_H	$I_T=0.5A$	MAX	50		mA	
I_L	$I_G=1.2I_{GT}$	MAX	I -III-IV	50	mA	
			II	100		
dv/dt	$V_D=2/3V_{DRM}$ T _j =125°C	MIN	500		V/us	
(dv/dt) _c	T _j =125°C	MIN	10		V/us	

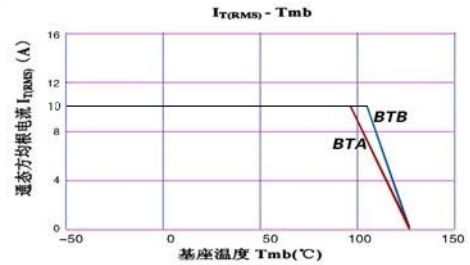
● **Static Characteristics**

Symbol	Test Conditions		Value	Unit
V_{TM}	$I_{TM}= 32A$ T _j =25°C	MAX	1.40	V
V_{T0}	T _j =125°C	MAX	0.86	V
R_d	T _j =125°C	MAX	40	mΩ
I_{DRM} I_{RRM}	T _j =25°C	MAX	5	uA
	T _j =125°C		1	mA
$R_{th(j-c)}$	BTA		2.05	°C/W

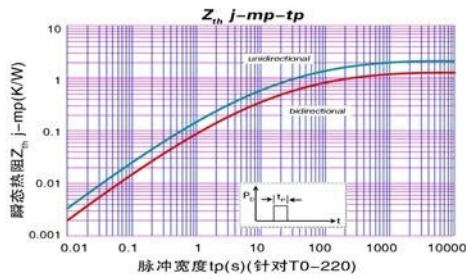
● Typical Characteristics



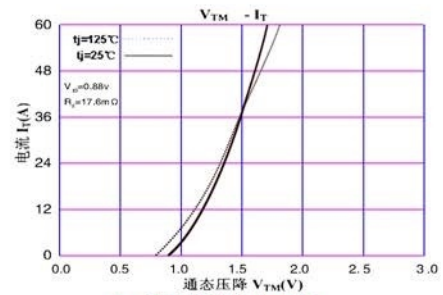
1、功耗与电流曲线 (180°C)



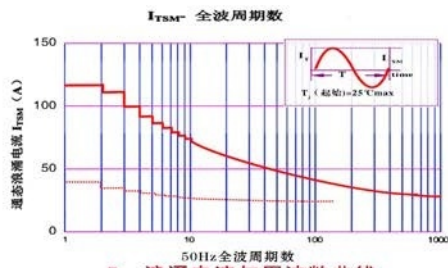
2、壳温与通态方均根电流曲线



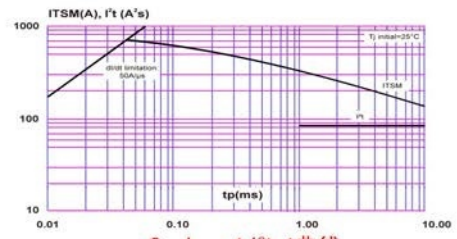
3、瞬态热阻曲线



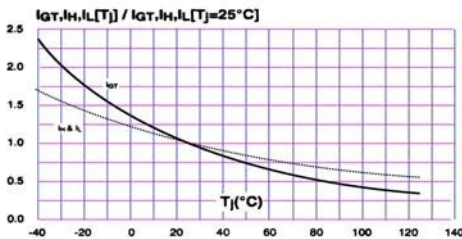
4、通态伏安特性曲线



5、浪涌电流与周波数曲线



6、 $I_{TSM}-t, I^2t-t$ 曲线



7、门极触发特性曲线

● TO-220 Outline Package Dimension

Unit: mm (± 0.1)

