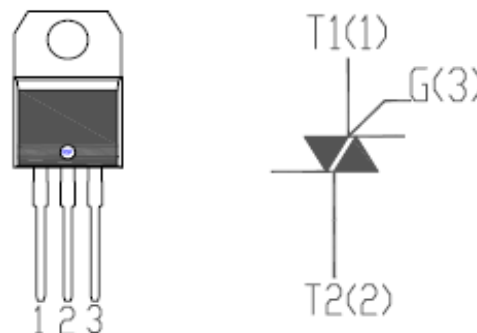


● Features:

- * 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
$I_{T(RMS)}$	BTA12-600B $T_c=80^{\circ}\text{C}$	12	A
I_{TSM}	$F=50\text{HZ}$ $t=20\text{ms}$	105	A
I^2t	$t_p=10\text{ms}$	55	A^2S
di/dt	$T_j=125^{\circ}\text{C}$	50	A/us
V_{DRM}/V_{RRM}	$T_j=25^{\circ}\text{C}$	600	V
I_{GM}	$t_p=20\text{us}$ $T_j=125^{\circ}\text{C}$	4	A
$P_{G(AV)}$	$T_j=125^{\circ}\text{C}$	1	W
T_{stg} T_j	$-40^{\circ}\text{C} \cdots +150^{\circ}\text{C}$ $-40^{\circ}\text{C} \cdots +125^{\circ}\text{C}$		$^{\circ}\text{C}$

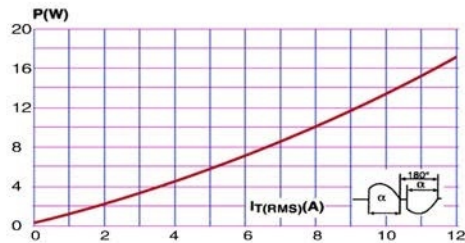
● **Electrical Characteristics**($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Test Conditions	Quadrant		Value		Unit	
I _{GT}	V _D =12V R _L =100Ω	I II III IV	MAX	I -II-III	IV	mA	
				≅ 50	≅ 70		
V _{GT}	MAX		1.3		V		
V _{GD}	T _j =125℃		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℃		MIN	500		V/us	
(dv/dt)c	T _j =125℃		MIN	10		V/us	

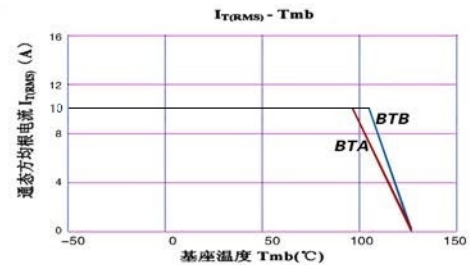
● **Static Characteristics**

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 T _j =125°C	MAX	5	uA
			1	mA
R _{th(j-c)}	BTA		2.05	°C/W

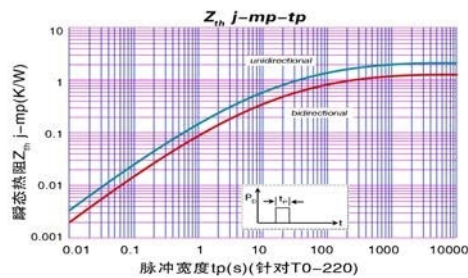
● Typical Characteristics



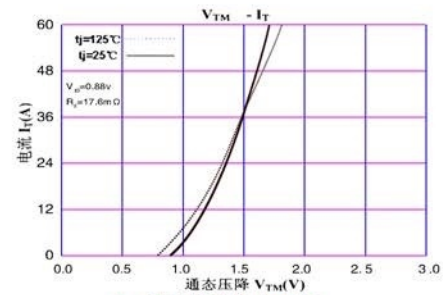
1、功耗与电流曲线 (180°C)



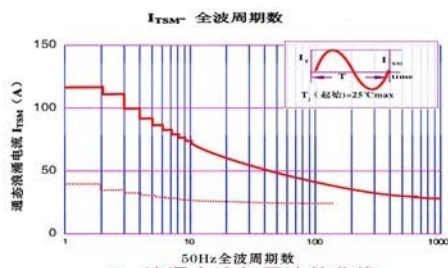
2、壳温与通态方均根电流曲线



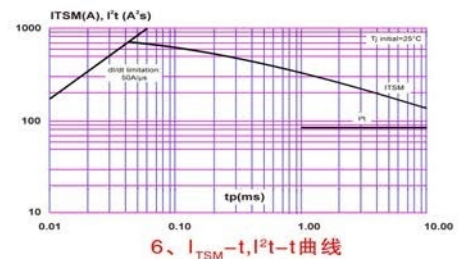
3、瞬态热阻曲线



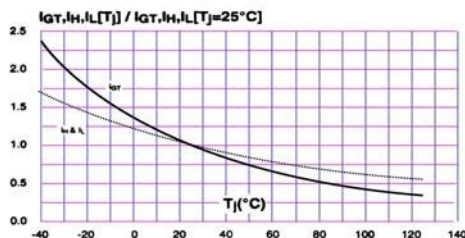
4、通态伏安特性曲线



5、浪涌电流与周波数曲线



6、 $I_{TSM}-t_p$ 曲线



7、门极触发特性曲线

● TO-220 Outline Package Dimension

Unit: mm (± 0.1)