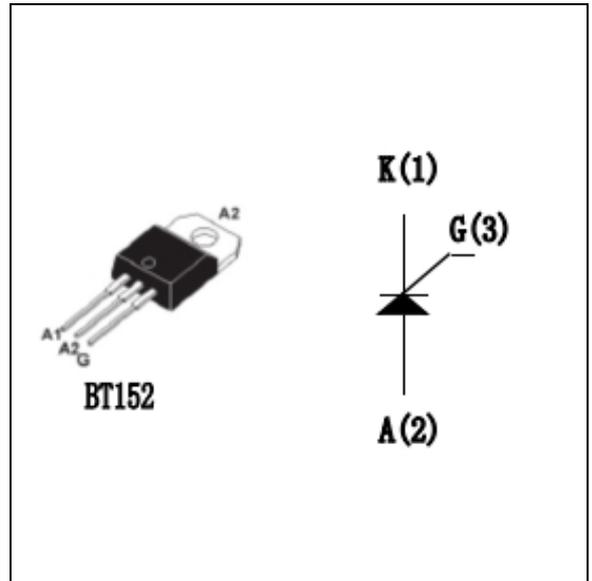


Features:

- * 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
$I_{T(RMS)}$	RMS on-state current	$T_c=90^{\circ}C$	12	A
I_{TSM}	Non repetitive surge peak on-state current	F=50HZ t=20ms	120	A
I^2t	I^2t value for fusing	tp=10ms	144	A ² S
di/dt	Critical rate of rise of on-state current	$T_j=125^{\circ}C$	50	A/us
V_{DRM}/V_{RRM}	Non repetitive surge peak off-state voltage	$T_j=25^{\circ}C$	600	V
I_{GM}	Peak gate current	tp=20us $T_j=125^{\circ}C$	4	A
$P_{G(AV)}$	Average gate power dissipation	$T_j=125^{\circ}C$	1	W
Tstg	Storage junction temperature range		-40~+150	°C
Tj	Operating junction temperature range		-40~+125	

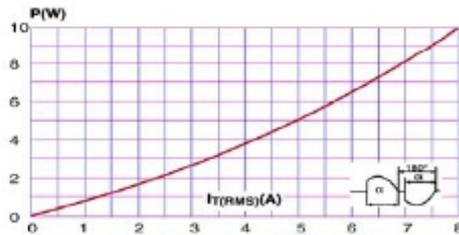
• **Electrical Characteristics (T_j=25°C, unless otherwise specified)**

Symbol	Test Condition	Quadrant		Value	Unit
I _{GT}	V _D =12V R _L =100Ω	I	MAX	15	mA
V _{GT}			MAX	1.5	V
V _{GD}	T _j =125°C		MIN	0.2	V
I _H	I _T =0.5A		MAX	30	mA
I _L	I _G =1.2I _{GT}	I	MAX	40	mA
				60	
dv/dt	V _D =2/3V _{DRM} T _j =125°C		MIN	500	V/us

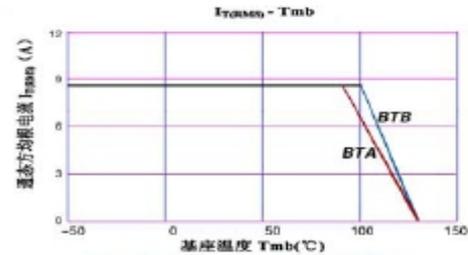
• **Static Characteristics**

Symbol	Test Condition			Value	Unit
V _{TM}	I _{TM} = 36A T _j =25°C	T _j =25°C	MAX	1.5	V
V _{TO}	T _j =125°C	T _j =125°C	MAX	0.86	V
R _d	T _j =125°C	T _j =125°C	MAX	36.6	mΩ
I _{DRM} I _{RRM}	T _j =25°C T _j =125°C	T _j =25°C T _j =125°C	MAX	5	uA
				1	mA
R _{th(j-c)}				1.75	°C/W

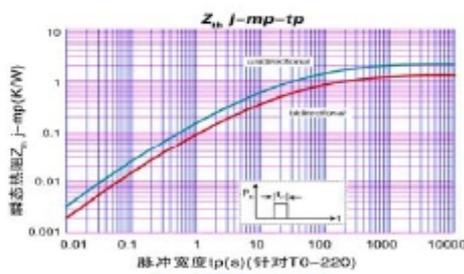
● Typical Characteristics



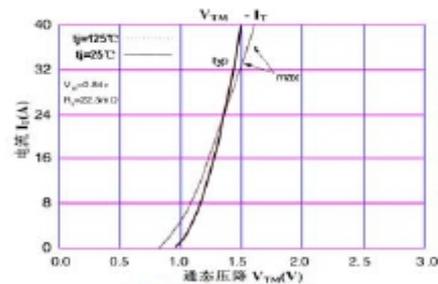
1、功耗与电流曲线 (180°C)



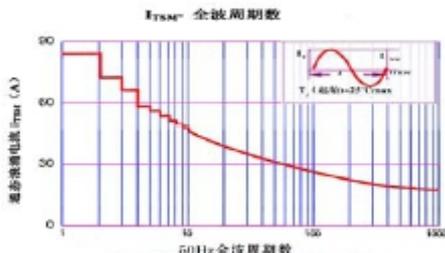
2、壳温与通态方均根电流曲线



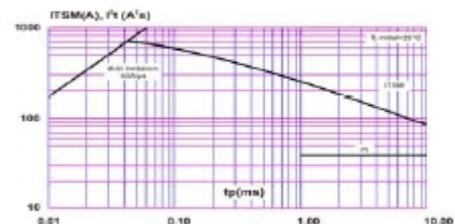
3、瞬态热阻曲线



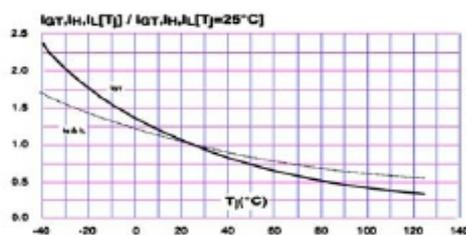
4、通态伏安特性曲线



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)

