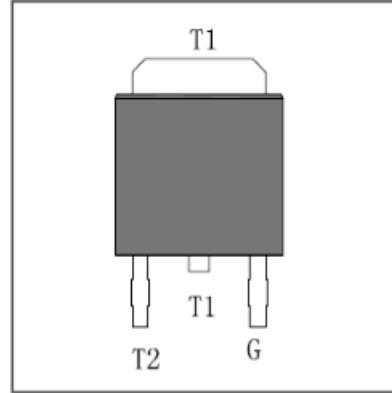


Features:

- * 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	8	A
Non repetitive surge peak on-state current(full cycle,Tj=25°C) F=50HZ tp=20ms	I _{TSM} F=50HZ tp=20ms	65	A
I ² t Value for fusing tp=10ms	I ² t tp=10ms	21	A ² S
Critical rate of rise of on-state current IG=2*IGT,tr<100ns,f=120Hz,Tj=125°C	di/dt Tj=150°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=150°C	2	A
Average gate power dissipation Tj=150°C	P _{G(AV)} Tj=150°C	1	W
Storage junction temperature range Operating junction temperature range	T _{stg} T _j	-40to+150 -40to+125	°C



BT137S-600D

8A Triac
RoHS
COMPLIANT● Electrical Characteristics(3 quadrant) ($T_j=25^\circ C$, unless otherwise specified)

Symbol	Test Condition	Quadrant		Value		Unit		
I_{GT}	$V_D=12V \quad R_L=100\Omega$	I II III IV	MAX	I	II	III	IV	mA
				10	25			
V_{GT}			MAX	1.5			V	
				0.25			V	
I_H	$I_T=0.5A$		MAX	60			mA	
I_L	$V_D=12V$ $I_{GT}=1.2A$	I -IV	MAX	60			mA	
		II		100				
dv/dt	$V_D=2/3V_{DRM} \quad T_j=125^\circ C$		MIN	500			V/us	
(dv/dt)c	$T_j=125^\circ C$		MIN	10			V/us	

● Static Characteristics

Symbol	Test Condition		Value	Unit
V_{TM}	$I_{TM}= 10A$ $T_j=25^\circ C$	MAX	1.5	V
V_{TO}	$T_j=125^\circ C$	MAX	0.86	V
R_d	$T_j=150^\circ C$	MAX	36.6	$m\Omega$
I_{DRM} I_{RRM}	$T_j=25^\circ C$ $T_j=125^\circ C$	MAX	5	μA
			1	mA
$R_{th(j-c)}$			1.25	$^\circ C/W$

- TO-252 Mechanical Dimension(in mm)

