

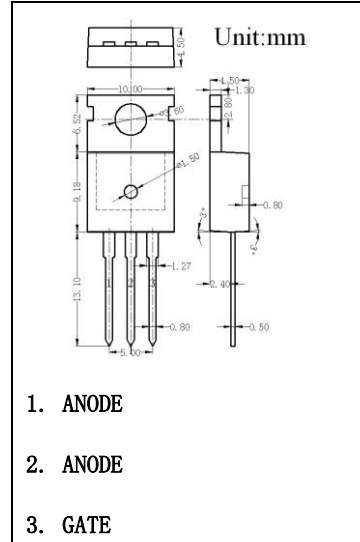


TO-220 Plastic-Encapsulate Thyristors

BT136/600D/600E TRIAC

DESCRIPTION

Passivated triacs in a plastic envelope, intended for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance. Typical applications include motor control, industrial and domestic lighting, heating and static switching.



ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

symbol	parameter		value	unit	
$I_{T(RMS)}$	RMS on-state current (full sine wave)	D ² PAK/TO-220	T _C =107°C	6	A
I_{TSM}	Non repetitive surge peak on-state current (full sine wave, T _j =25°C)	t=20ms	25	A	
		t=16.7ms	27		
I_{GM}	Peak gate current		2	A	
$P_{G(AV)}$	Average gate power dissipation	T _j =125°C	0.5	W	
T _{stg}	Storage junction temperature range		-40 to +150	°C	
T _j	Operating junction temperature range		-40 to +125		

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max			Unit		
Rated repetitive peak off-state/reverse voltage	V_{DRM}, V_{RRM}	$I_D=10\mu A$	600				V		
Rated repetitive peak off-state current	I_{DRM}, I_{RRM}	$V_D=600V$				10	μA		
On-state voltage	V_{TM}	$I_T=5A$				1.7	V		
Gate trigger current	I_{GT}	$V_D=12V$ $R_L=100\Omega$			600	600D	600E		
				I	T ₂ (+), G(+)	35	5	10	mA
				II	T ₂ (+), G(-)	35	5	10	mA
				III	T ₂ (-), G(-)	35	5	10	mA
	IV	T ₂ (-), G(+)	70	10	25	mA			
Gate trigger voltage	V_{GT}	$V_D=12V$ $R_L=100\Omega$		I	T ₂ (+), G(+)	1.5	1.5	1.5	V
				II	T ₂ (+), G(-)	1.5	1.5	1.5	V
				III	T ₂ (-), G(-)	1.5	1.5	1.5	V
				IV	T ₂ (-), G(+)	-	-	-	V
Holding current	I_H	$I_T=100mA$ $I_G=20mA$		20	20	20	mA		

Typical Characteristics

