

TRIAC

GENERAL DESCRIPTION

Glass passivated triacs in a plastic envelope , intended for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance.

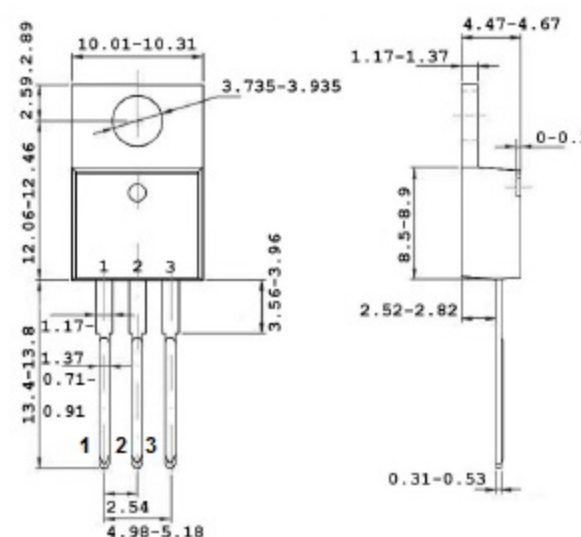
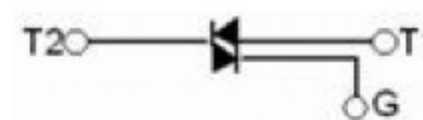
Typical applications include motor control, industrial and domestic lighting , heating and static switching.

MAIN FEATURES

Symbol	value	unit
$I_{T(RMS)}$	6	A
V_{DRM}/V_{RRM}	600	V
I_{TSM}	25	A

TO-220

1. ANODE
2. ANODE
3. GATE



UNIT:mm

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}	$V_D=620V$			10	μA
On-state voltage		V_{TM}	$I_T=5A$			1.7	V
Gate trigger current	I	I_{GT}	$T_2(+), G(+)$	$V_D=12V$ $R_L=100\Omega$		10	mA
	II		$T_2(+), G(-)$			10	mA
	III		$T_2(-), G(-)$			10	mA
	IV		$T_2(-), G(+)$			-	mA
Gate trigger voltage	I	V_{GT}	$T_2(+), G(+)$	$V_D=12V$ $R_L=100\Omega$		1.45	V
	II		$T_2(+), G(-)$			1.45	V
	III		$T_2(-), G(-)$			1.45	V
	IV		$T_2(-), G(+)$			-	V
Holding current		I_H	$I_T=100mA$ $I_G=20mA$			20	mA