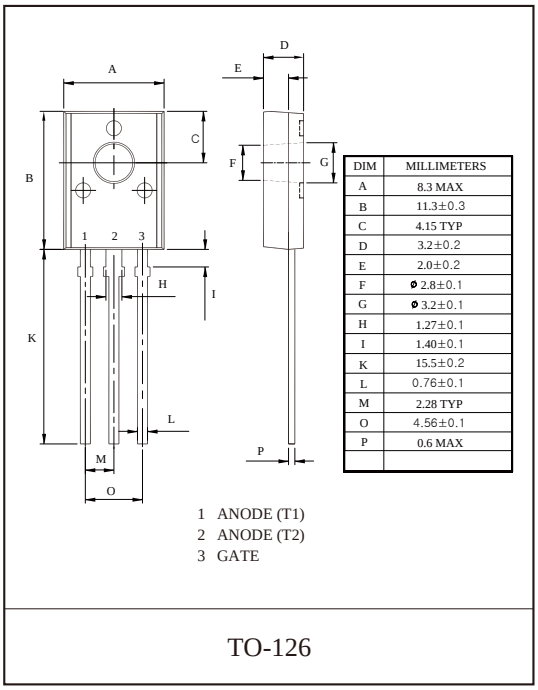
BT136-600 TRIAC



DIM	MILLIMETERS
A	8.3 MAX
B	11.3±0.3
C	4.15 TYP
D	3.2±0.2
E	2.0±0.2
F	ø 2.8±0.1
G	ø 3.2±0.1
H	1.27±0.1
I	1.40±0.1
K	15.5±0.2
L	0.76±0.1
M	2.28 TYP
O	4.56±0.1
P	0.6 MAX

TO-126

MAIN FEATURES

Symbol	value	unit
$I_{T(RMS)}$	4	A
V_{DRM}/V_{RRM}	600	V
I_{TSM}	25	A

GENERAL DESCRIPTION

. Glass passivated triacs in a plastic envelope , intended for use in applications requiring high bidirectional transient andblocking 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℃ unless otherwise noted)

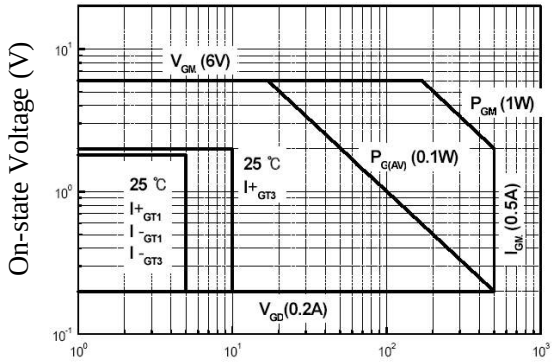
symbol	parameter		value	unit
$I_{T(RMS)}$	RMS on-state current (full sine wave)	T_C=107℃	4	A
I_{TSM}	Non repetitive surge peak on-state current (full sine wave, Tj =25℃)	t=20ms	25	A
		t=16.7ms	27	
I_{GM}	Peak gate current		2	A
$P_{G(AV)}$	Average gate power dissipation	T_j=125℃	0.5	W
T_{stg}	Storage junction temperature range		-40 to +150	℃
T_j	Operating junction temperature range		-40 to +125	

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions		Min	Max	Unit
Rated repetitive peak off-state/reverse voltage		V_{DRM},V_{RRM}	I_D=10μA		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=100Ω		5	mA
	II		T_2(+), G(-)			5	mA
	III		T_2(-), G(-)			5	mA
	IV		T_2(-), G(+)			10	mA
Gate trigger voltage	I	V_{GT}	T_2(+), G(+)	V_D=12V R_L=100Ω		1.45	V
	II		T_2(+), G(-)			1.45	V
	III		T_2(-), G(-)			1.45	V
	IV		T_2(-), G(+)			1.7	V
Holding current		I_H	I_T =100mA	I_G=20mA		10	mA

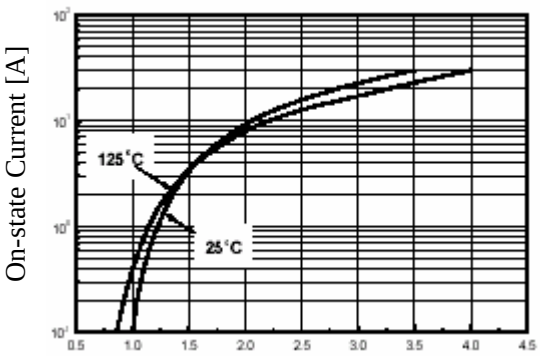
Performance Curves

Fig 1. Gate Characteristics



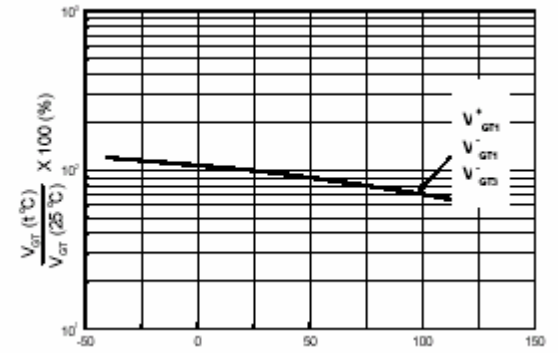
Gate Current（mA）

Fig 2. On-State Voltage



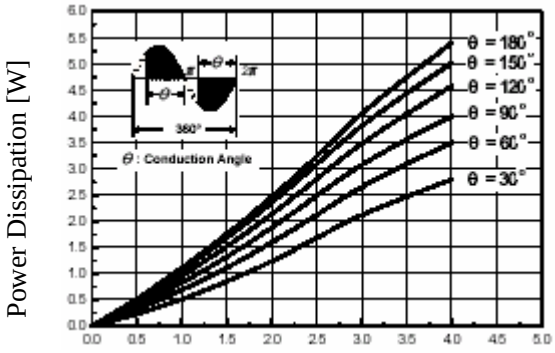
On-state Voltage（V）

Fig 3. Gate Trigger Voltage vs. Junction Temperature



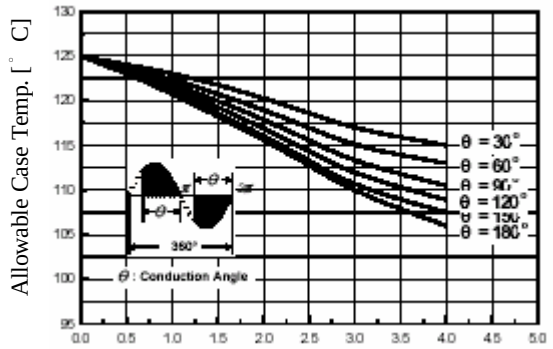
Junction Temperature [℃]

Fig 4. On State Current vs. Maximum Power Dissipation



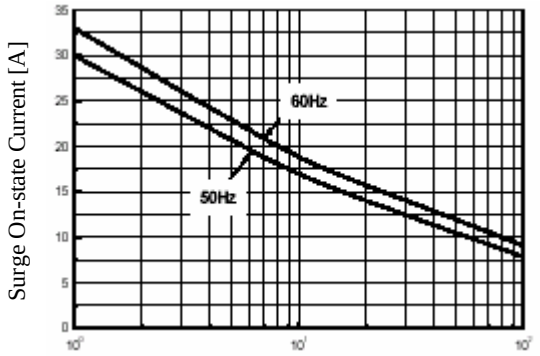
RMS On-state current [A]

Fig 5. On State Current vs. Allowable Case Temperature



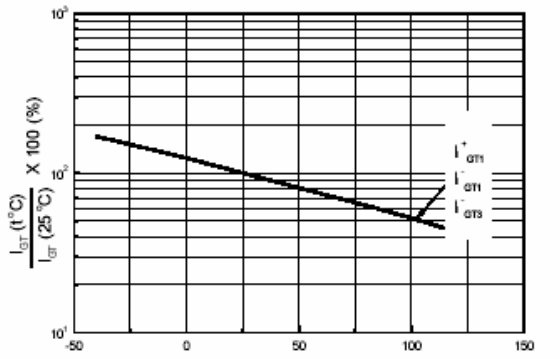
RMS On-state Current [A]

Fig 6. Surge On-State Current Rating (Non-Repetitive)



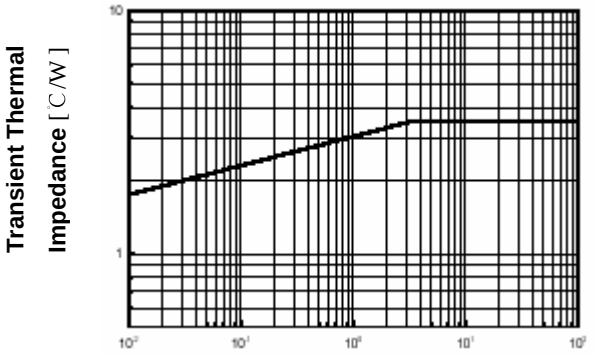
Time（Cycles）

Fig 7. Gate Trigger Current vs. Junction Temperature



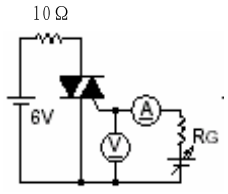
Junction Temperature [℃]

Fig 8. Transient Thermal Impedance

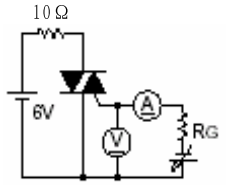


Time (sec)

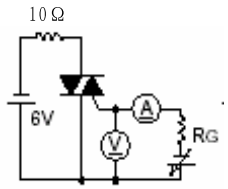
Fig 9. Gate Trigger Characteristics Test Circuit



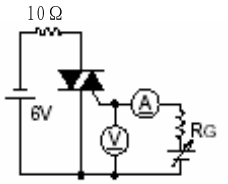
Test Procedure Ⅰ



Test Procedure Ⅱ



Test Procedure Ⅲ



Test Procedure Ⅳ