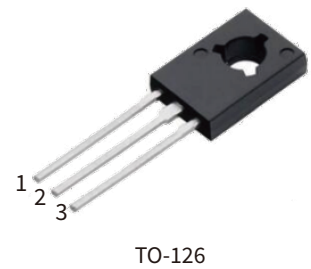


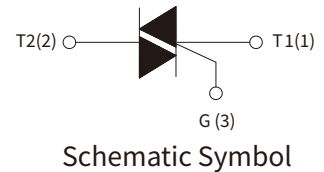
FEATURES

- | NPNPN five layers glass passivated triacs with multi-layer backside metal
- | Package TO-126 is RoHS compliant.



APPLICATIONS

- | Home appliances including motor control, heating control, bread maker



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Repetitive peak off-state voltage ($T_j=25^\circ\text{C}$)	V_{DRM}	600	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)	V_{RRM}	600	V
RMS on-state current ($T_c=95^\circ\text{C}$)	$I_{\text{T(RMS)}}$	4	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	25	
I2t value for fusing ($t_p=10\text{ms}$)	I2t	3.1	A2S
Critical rate of rise of on-state current ($I_G=2 \cdot I_{\text{GT}}$)	I - II - III	50	A/ μs
	IV	10	
Peak gate current	I_{GM}	2	A
Average gate power dissipation	$P_{\text{G(AV)}}$	0.5	W
Peak gate power	P_{GM}	5	W
Operating junction temperature range	T_j	-40~+125	°C
Storage junction temperature range	T_{STG}	-40~+150	

ELECTRICAL CHARACTERISTICS ($T_j=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
			D	E	
I_{GT}	$V_D=12\text{V}, I_T=0.1\text{A}$ $T_j=25^{\circ}\text{C}, \text{Fig. 6}$	I - II - III	≤ 5	≤ 10	mA
		IV	≤ 10	≤ 25	
V_{GT}		I - II - III - IV	≤ 1.3		V
V_{GD}	$V_D=V_{DRM}, T_j=125^{\circ}\text{C}$		≥ 0.2		V
I_H	$V_D=12\text{V}, I_T=0.1\text{A}$ $T_j=25^{\circ}\text{C}, \text{Fig. 6}$	I - II - III - IV	≤ 10	≤ 15	mA
I_L		I - III - IV	≤ 10	≤ 15	
		II	≤ 15	≤ 20	
dV_D/dt	$V_D=67\%V_{DRM}, T_j=125^{\circ}\text{C}$		≥ 10	≥ 20	V/ μs
V_{TM}	$I_{TM}=6\text{A}, t_p=380\mu\text{s}, \text{Fig. 4}$		≤ 1.55		V
I_{DRM}	$V_D=V_{DRM}, V_R=V_{RRM}$	$T_j=25^{\circ}\text{C}$	≤ 5		μA
I_{RRM}		$T_j=125^{\circ}\text{C}$	≤ 0.5		mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	Junction to case(AC)	3	$^{\circ}\text{C}/\text{W}$
$R_{th(j-a)}$	junction to ambient	100	$^{\circ}\text{C}/\text{W}$

PARAMETER CHARACTERISTIC CURVE

FIG.1 Maximum power dissipation versus RMS on-state current

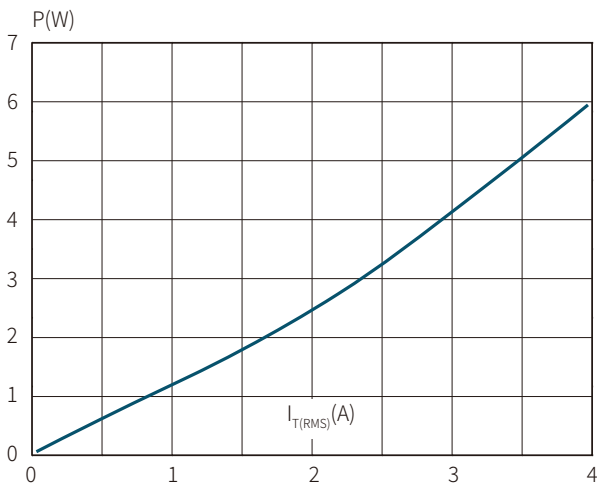


FIG.2: RMS on-state current versus case temperature

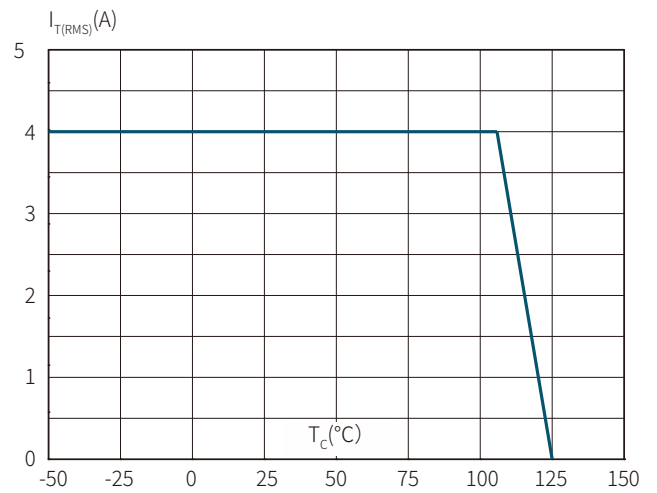


FIG.3: Surge peak on-state current versus number of cycles

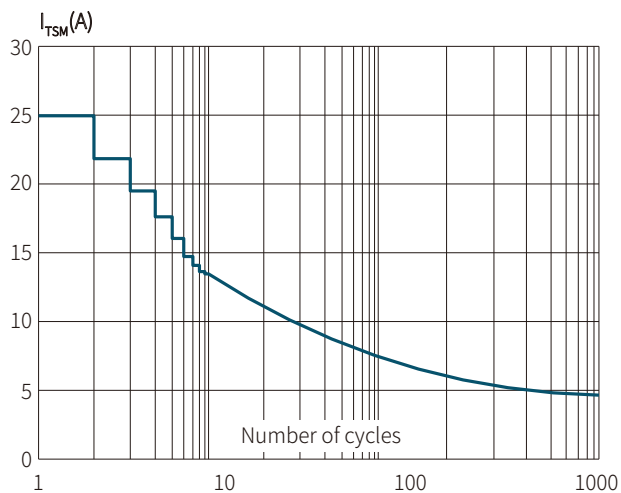


FIG.4 On-state characteristics (maximum values)

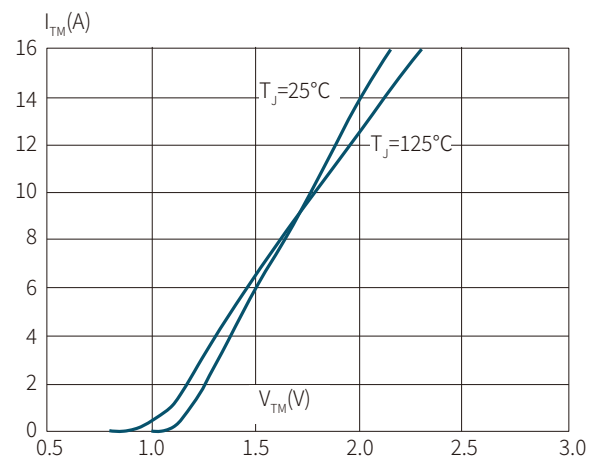


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$ and corresponding value of I^2t ($dI/dt < 50\text{A}/\mu\text{s}$)

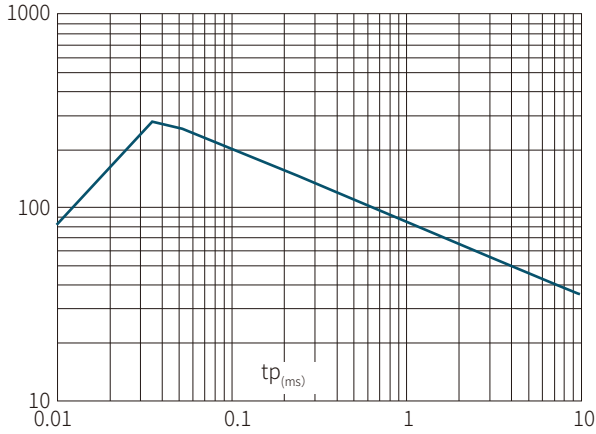
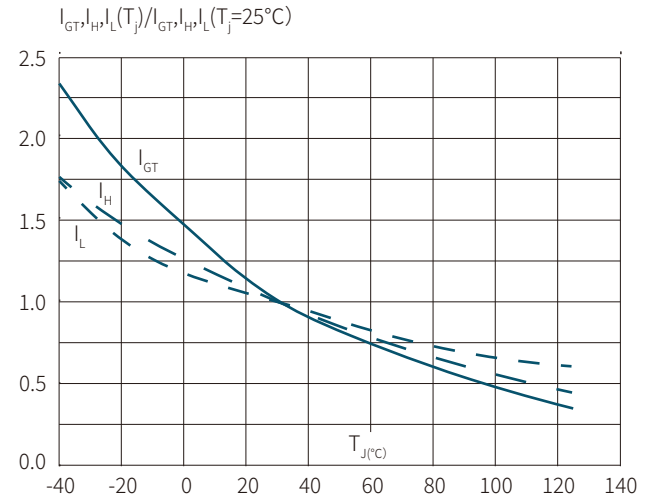
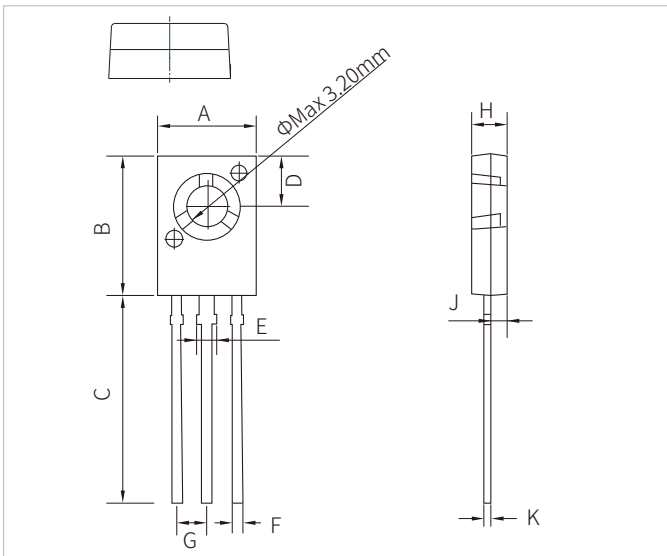


FIG.6 Relative variations of gate trigger current, holding current, latching current versus junction temperature



TO-126 PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	7.40		7.80	0.291		0.307
B	10.6		11.2	0.417		0.441
C	15.3		16.3	0.602		0.642
D	3.90		4.10	0.154		0.161
E	1.17		1.47	0.046		0.058
F	0.66		0.86	0.026		0.034
G		2.29			0.090	
H	2.50		2.90	0.098		0.114
J	1.10		1.50	0.043		0.059
K	0.45		0.60	0.018		0.024

ORDERING INFORMATION

Part Number	Package	Qty/pcs		
		Tube/Bag	Inner Box	Carton
BT134-600D(E)	TO-126	50(tube)	1000	10000
		500(bag)	10000	20000

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