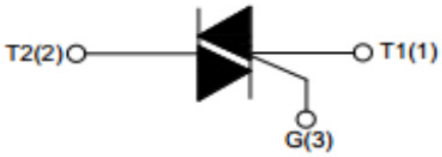
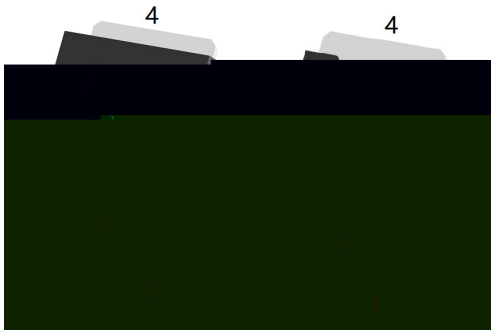
TO-252

Triac in a TO-252 Plastic Package.

Medium current triac, Low on state voltage drop,High reliability and stability,Low thermal resistance, HF Product.

Suitable for general purpose AC switching .Such as static relays,heating regulation,induction motor starting circuits,motor speed controllers,etc.





PIN1 Main Terminal 1 PIN 2 4 Main Terminal 2 PIN 3 Gate

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Repetitive peak off-state/reverse voltages(T_j=125)	V_{DRM}/V_{RRM}	800	V
RMS on-state current(T_C=110)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current(full cycle, T_j=25°C)	$I_{TSM(t=20ms)}$	80	A
I^2t value for fusing(T_j=25)	$I^2t_{(tp=10ms)}$	36	A^2s
Critical rate of rise of on-state current (I_G =2I_{GT}, f=120Hz T_j=125)	dI/dt I-II-III	50	A/μs
Peak gate current(t_p =20μs T_j=125)	I_{GM}	4.0	A
Average gate power dissipation(T_j=125)	$P_{G(AV)}$	1	W
Operating junction temperature range	T_j	-40 125	
Storage junction temperature range	T_{stg}	-40 150	
Junction to ambient(AC)	$R_{th(j-a)}$	100	/W
Junction to case for(AC)	$R_{th(j-c)}$	3.1	

Symbol	Test Conditions	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=30Ω	I-II-III	Max.	35	mA
V_{GT}	V_D=12V R_L=30Ω	I-II-III	Max.	1.3	V
V_{GD}	V_D=V_{DRM} R_L=3.3KΩ T_j=125	I-II-III	Min.	0.2	V
I_L	I_G=1.2I_{GT}	I-III	Max.	50	mA
		II		60	
I_H	I_T=100mA		Max.	35	mA
(dV/dt)	V_D=67% V_{DRM} Gate Open	Tj=125	Min.	400	V/μs
V_{TM}	I_{TM} =11A t_p=380μs	Tj=25	Max.	1.55	V
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	Tj=25		10	μA
I_{RRM}		Tj=125		1	mA

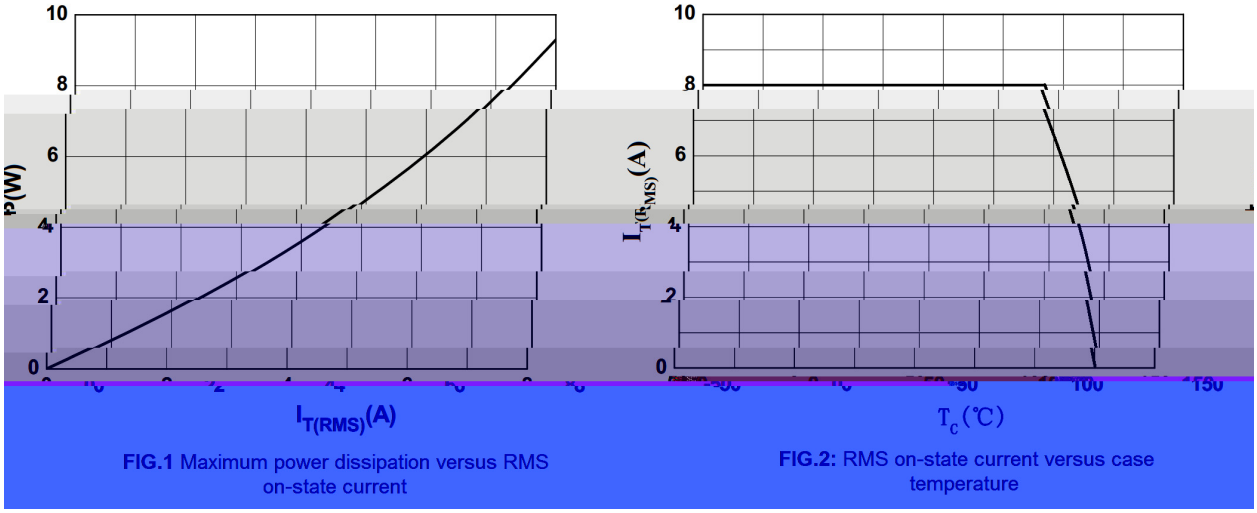
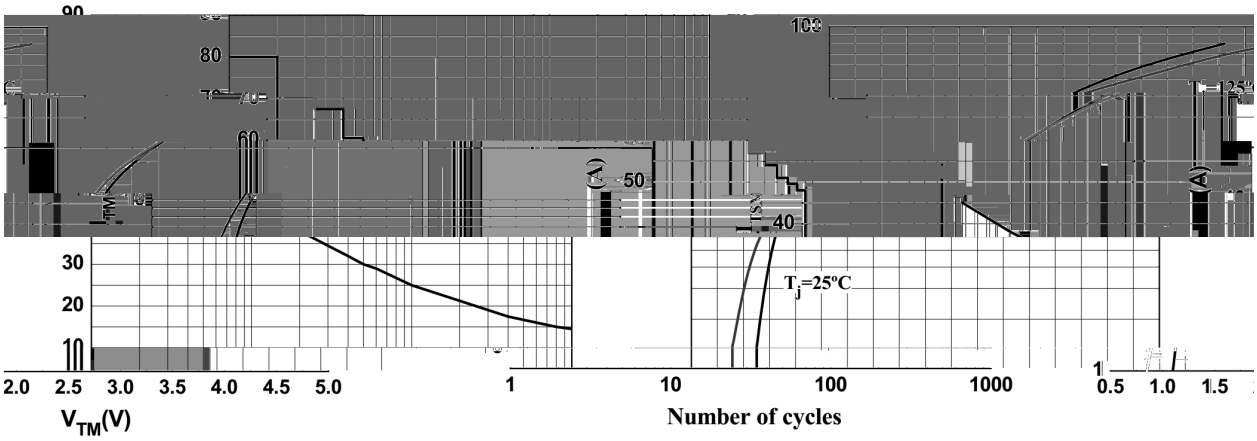


FIG.1 Maximum power dissipation versus RMS on-state current

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



4: On-state characteristics

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

FIG.

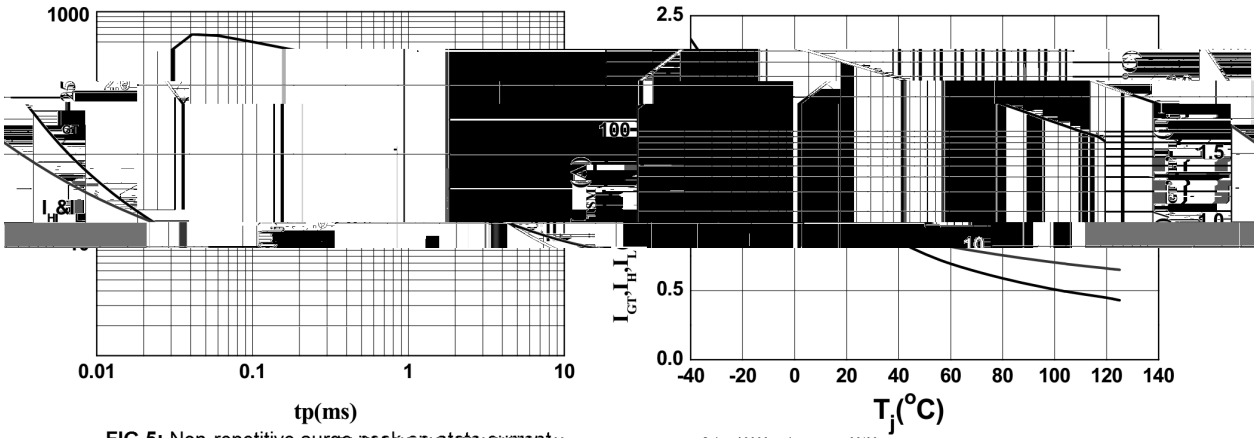
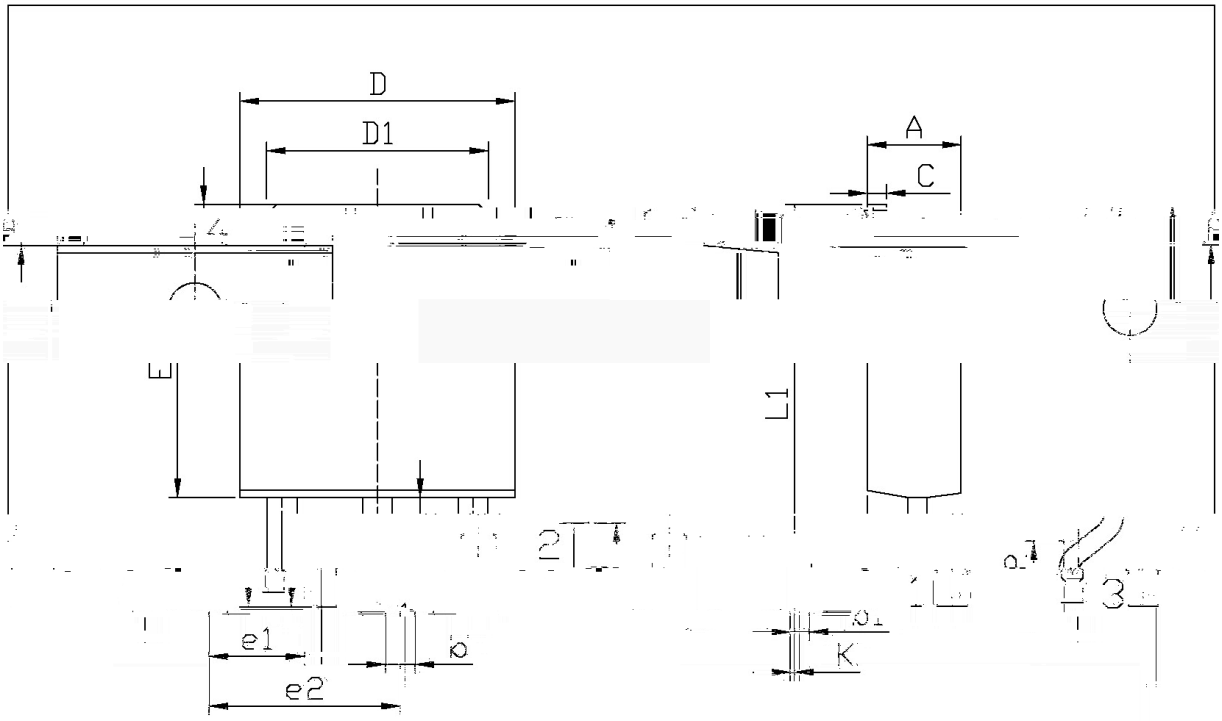


FIG.5: Non-repetitive surge peak on-state current versus sinusoidal pulse width (tp<10ms), and corresponding value of I²t (dI/dt<100A/μs)

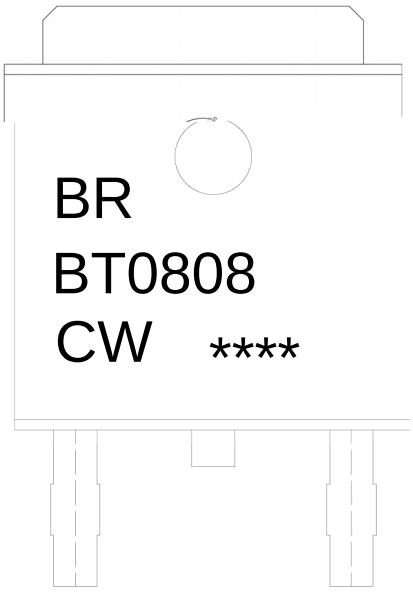
FIG.6: Relative variation of gate trigger current, holding current and latching current versus junction temperature



单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.50	0.90	e2	4.43	4.73
b1	0.45	0.55	L1	9.45	9.95
C	0.45	0.55	L2	1.25	1.75
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10

TO-252



BR

BT0808

CW I_{GT}

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Note:

BR:	Company Code
BT0808:	Product Type Code
CW:	I_{GT} Bracket Code
****:	Lot No. Code, code change with Lot No