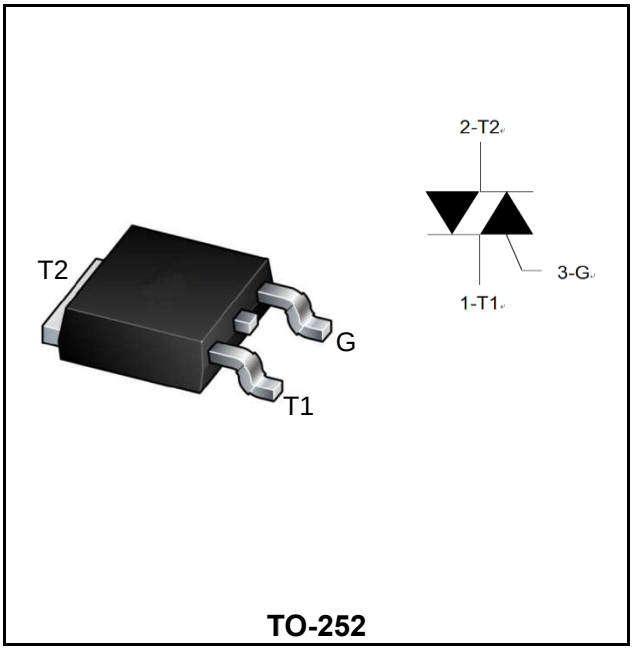
4A 3Quadrants TRIACs

Product Summary

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
V_{DRM} V_{RRM}	600/800	V
V_{TM}	1.6	V



TO-252

Features

With high ability to withstand the shock loading of large current, Provide high dv/dt rate with strong resistance to electromagnetic interference.

Application

Power charger, T-tools, massager, solid state relay, AC Motor speed regulation and so on.

Order Information

Part Number	Package	Marking	packing	Delivery Quantity
BTB04D	TO-252	BTB04 600(T/S/C/B)W XXXX	BOX	3000PCS/Tape
BTB04D	TO-252	BTB04 800(T/S/C/B)W XXXX	BOX	3000PCS/Tape

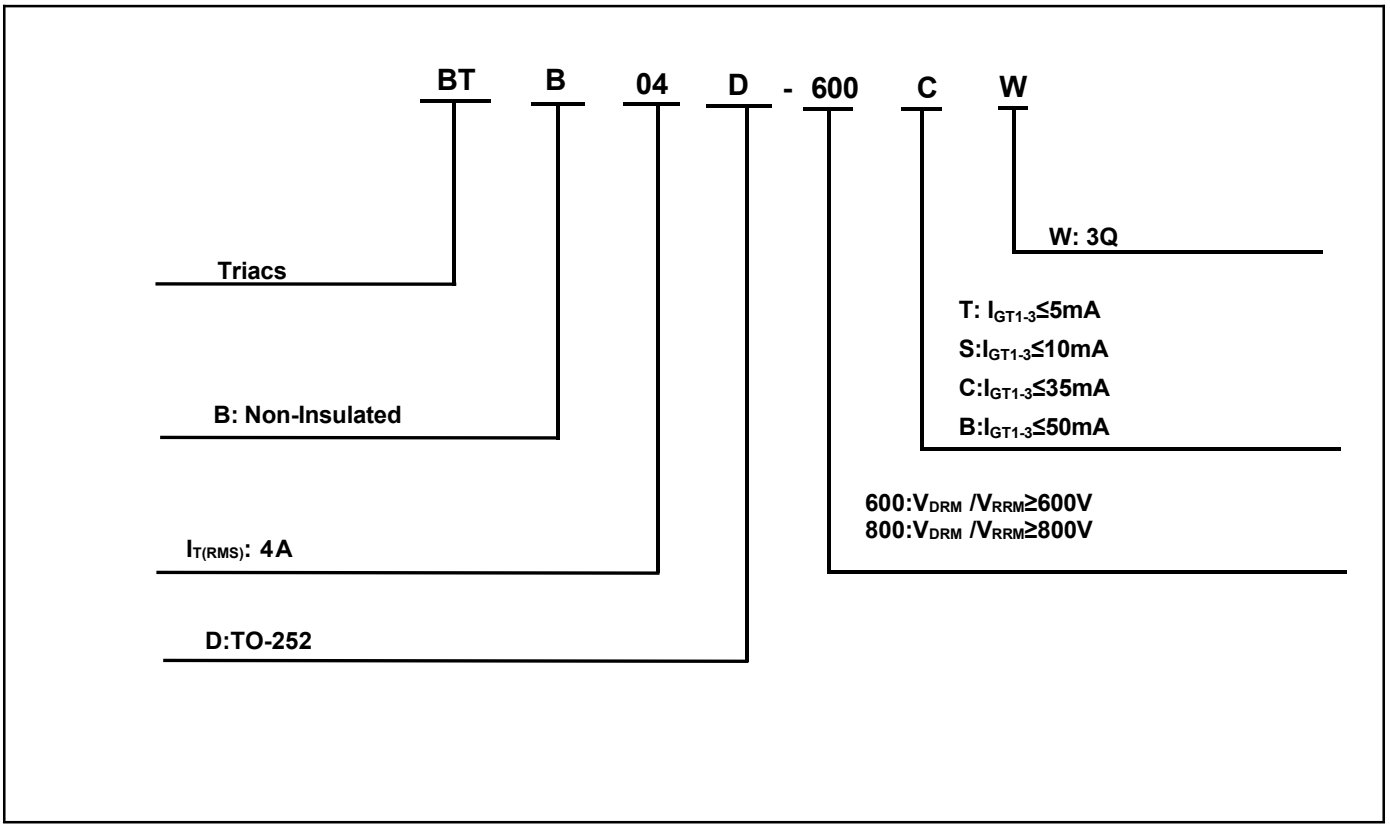
Absolute maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value		Unit
Repetitive peak off-state voltage	V_{DRM}	600/800		V
Repetitive peak reverse voltage	V_{RRM}	600/800		V
RMS on-state current	$I_{T(RMS)}$	4		A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	35		A
I^2t value for fusing (tp=10ms)	I^2t	8		A^2S
Critical rate of rise of on-state current (I_G =2 x I_{GT})	dI_T/dt	I - II - III	50	A/μs
Peak gate current	I_{GM}	4		A
Average gate power dissipation	$P_{G(AV)}$	0.5		W
Junction Temperature	T_J	-40~+125		°C
Storage Temperature	T_{STG}	-40 ~+150		°C

Electrical characteristics (T_A=25°C, unless otherwise noted)

Parameter	Symbol	Test Condition		Value				Unit
				TW	SW	CW	BW	
Gate trigger current	I_{GT}	V_D=12V,R_L=30Ω	Ⅰ-Ⅱ-Ⅲ	5	10	35	50	mA
Gate trigger voltage	V_{GT}		Ⅰ-Ⅱ-Ⅲ	1.3				V
Non-triggering gate voltage	V_{GD}	V_D=V_{DRM},R_L=3.3kΩ,T_j=125℃		0.2				V
Holding current	I_H	I_T=100mA	Ⅰ-Ⅲ	10	20	45	60	mA
Latching current	I_L	I_G=1.2I_{GT},	Ⅰ-Ⅲ	10	20	50	70	mA
			Ⅱ	15	35	70	80	
Critical-rate of rise of commutation voltage	dV/dt	V_D=67%V_{DRM}, T_j=125℃		20	200	500	1000	V/μs
STATIC CHARACTERISTICS								
On-state Voltage	V_{TM}	I_{TM}=5.5A,tp=380μs		1.6				V
Repetitive Peak Off-State Current	I_{DRM}	V_D=V_{DRM}= V_{RRM}	T_j=25℃	10	10	10		μA
Repetitive Peak Reverse Current	I_{RRM}		T_j=125℃	1	1	1		mA
THERMAL RESISTANCES								
Ihermal resistance	$R_{th\ (j-c)}$	Junction to case			TYP.	6.0		℃/W
	$R_{th\ (j-a)}$	Junction to ambient			TYP.	70		℃/W

Ordering Information



Typical Characteristics

FIG.1: Maximum power dissipation versus RMS on-state current (full cycle)

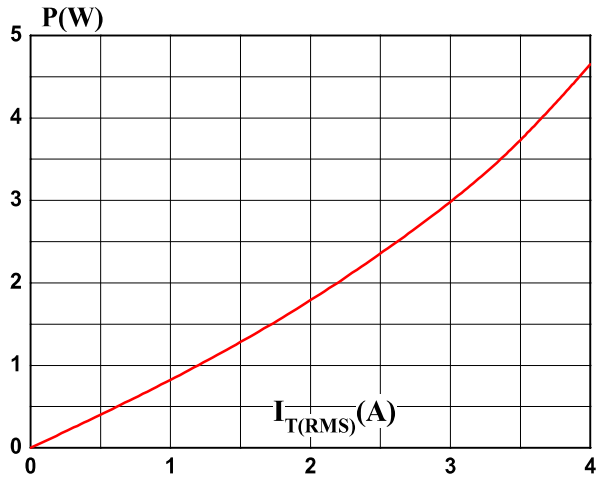


FIG.2: RMS on-state current versus case temperature (full cycle)

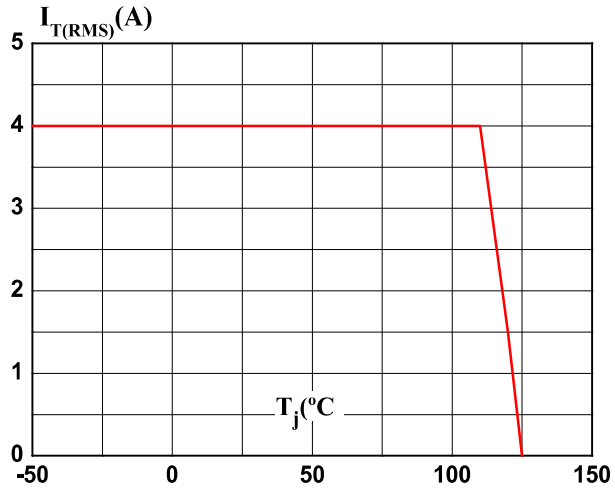


FIG.3: Surge peak on-state current versus number of cycles

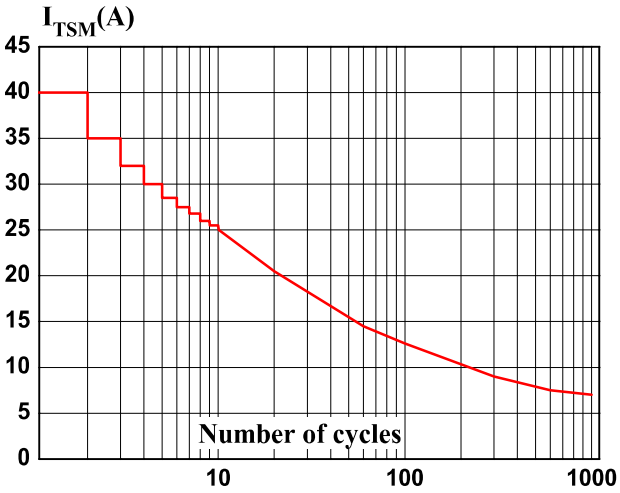


FIG.4: On-state characteristics (maximum values)

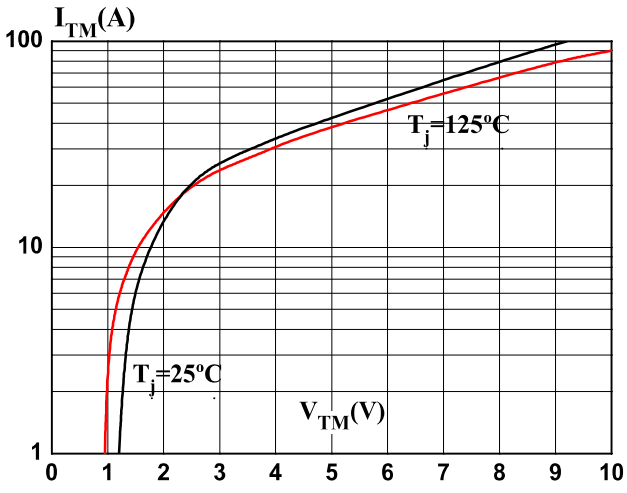


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width tp < 10ms

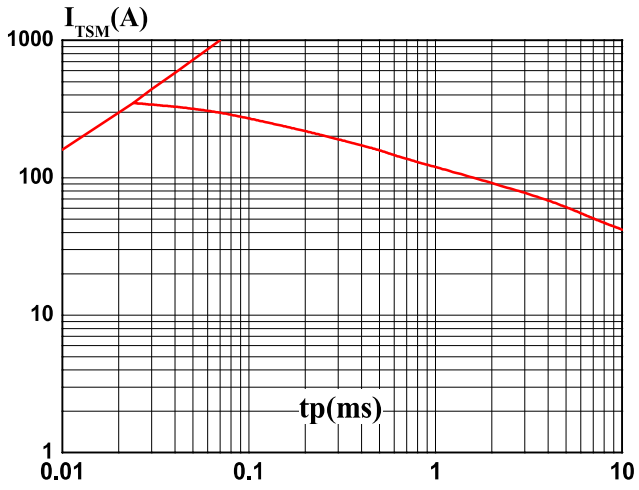
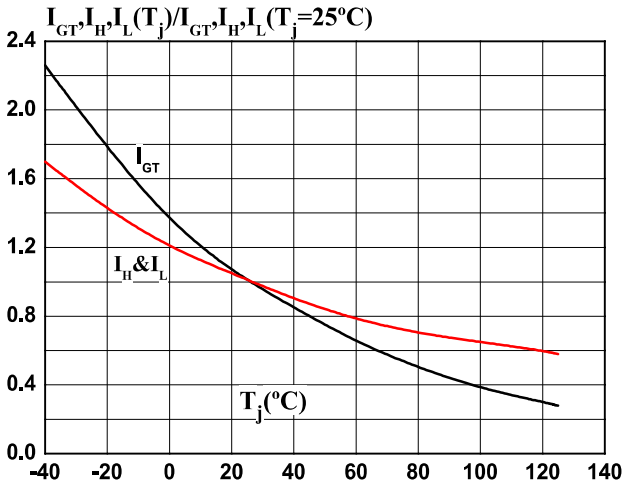
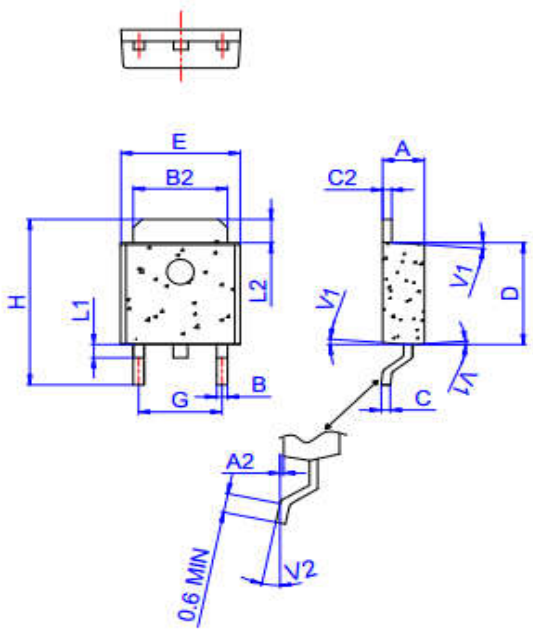


FIG.6: Relative variations of gate trigger current, holding current and latching current versus junction temperature (typical values)



Package Information

TO-252



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.03		0.23	0.001		0.009
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G	4.40		4.70	0.173		0.185
H	9.35		10.6	0.368		0.417
L1	1.30		1.70	0.051		0.067
L2	1.37		1.50	0.054		0.059
V1		4°			4°	
V2	0°		8°	0°		8°

单击下面可查看定价，库存，交付和生命周期等信息

>>YFW(佑风微)