4A 4Quadrants TRIACs

Product Summary

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
V_{DRM} V_{RRM}	600/800	V
V_{TM}	1.65	V

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

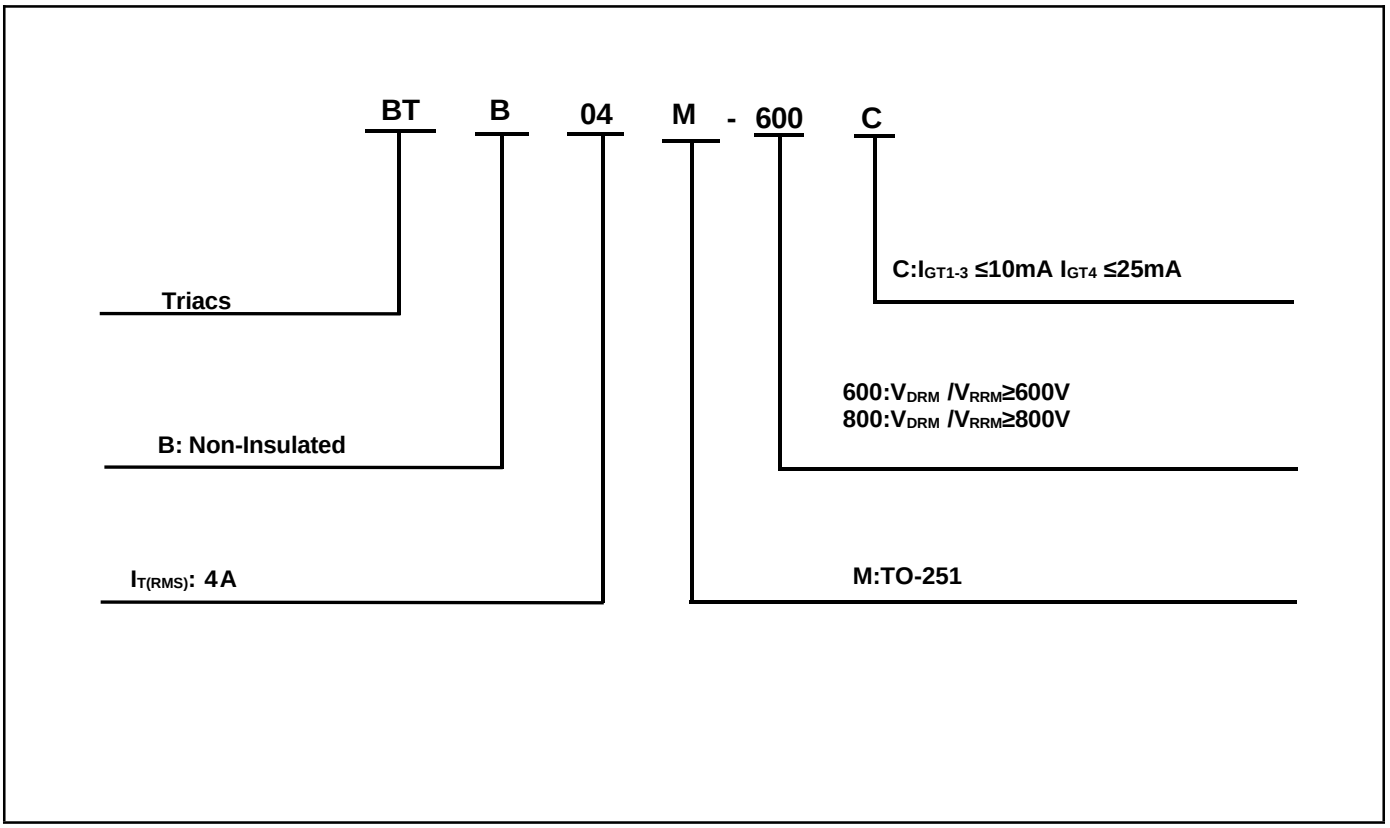
Parameter		Symbol		Value	Unit
Repetitive peak off-state voltage		V_{DRM}		600/800	V
Repetitive peak reverse voltage		V_{RRM}		600/800	V
RMS on-state current		$I_{T(RMS)}$		4	A
Non repetitive surge peak on-state current	T_J=25ÁC t= 8.3ms	I_{TSM}		42	A
	T_J=25ÁC t= 10ms			40	
I^2t value for fusing (tp=10ms)		I^2t		8	A^2S
Critical rate of rise of on-state current (I_G = 2 I_{GT} dI_G/dt = 0.1 A/µs)	Repetitive f=50Hz	dI_T/dt		10	A/µs
	Non Repetitive			50	
Peak gate current		I_{GM}		4	A
Average gate power dissipation		$P_{G(AV)}$		1	W
Junction Temperature		T_J		-40~+110	℃
Storage Temperature		T_{STG}	1	-40 ~+150	

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

Parameter	Symbol	Test Condition		Value			Unit
				Min	Typ	Max	
Gate trigger current	I_{GT}	V_D=12V,R_L=33Ω	- -		5	10	mA
					10	25	mA
Gate trigger voltage	V_{GT}	V_D=12V,R_L=33Ω				1.5	V
Non-triggering gate voltage	V_{GD}	V_D=V_{DRM},R_L=3.3kΩ,T_j=110		0.2			V
Holding current	I_H	I_T = 100mA ,gate open			15	25	mA
Latching current	I_L	I_G=1.2I_{GT}	- -			20	mA
						40	
Critical-rate of rise of commutation voltage*	dV/dt	V_D=67%V_{DRM}, T_j=110			10		V/μs
STATIC CHARACTERISTICS							
On-state Voltage	V_{TM}	I_{TM}=5.5A,tp=380εs			1.2	1.65	V
Repetitive Peak Off-State Current	I_{DRM}	V_D=V_{DRM}= V_{RRM}	T_j=25			10	μA
Repetitive Peak Reverse Current	I_{RRM}		T_j=110			0.75	mA
THERMAL RESISTANCES							
Ihermal resistance	$R_{th\ (j-c)}$	Junction to case			TYP.	3.2	/W
	$R_{th\ (j-a)}$	Junction to ambient			TYP.	60	/W

***:For either polarity of electrode MT2 voltage with reference to electrode T1.**

Ordering Information



Typical Characteristics

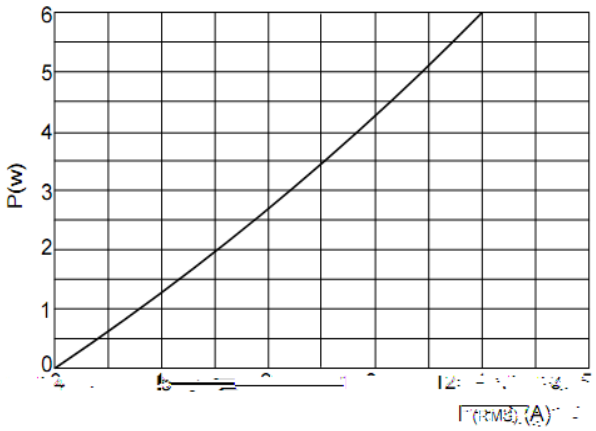


Fig.1: Maximum RMS power dissipation versus RMSon-statecurrent

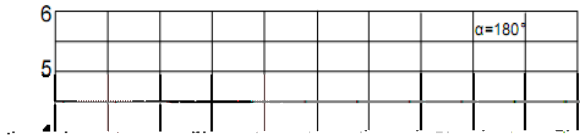


Fig.2: RMS on-state current versus case temperature

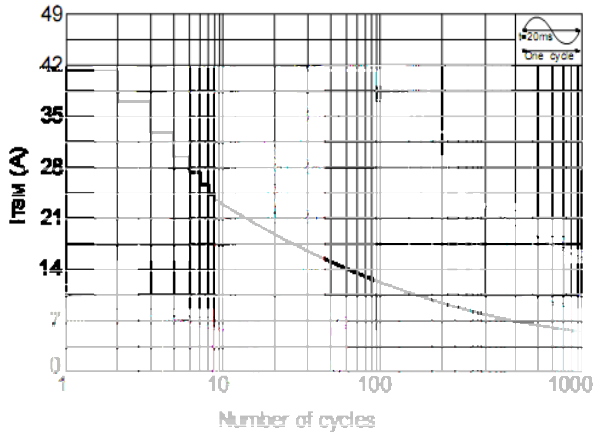


Fig.3. Surge peak on-state current versus number of cycles

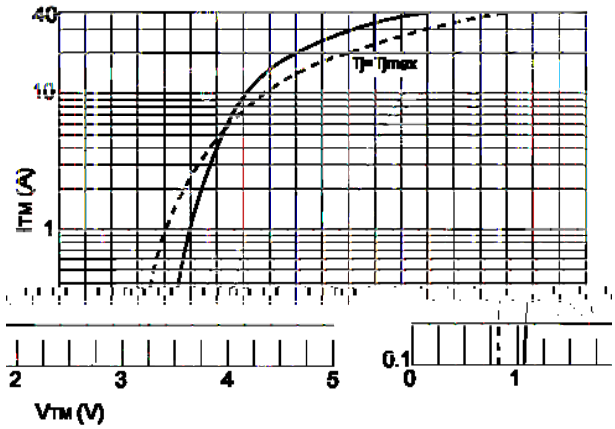


Fig.4. On-state characteristics (maximum values)

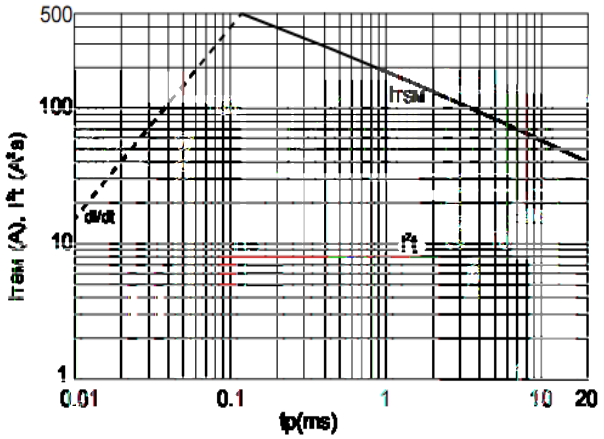


Fig.5:Non Repetitive surge peak on-state current for a sinusoidal pulse with width tp<20ms and corresponding value of I t (dI/dt < 50A/μs)

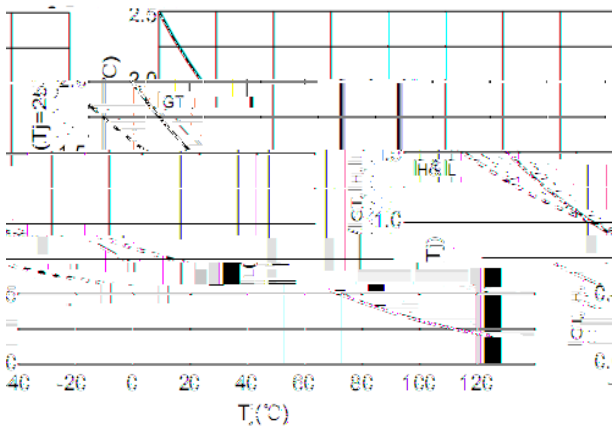


Fig.6. Rel ative variations of gate trigger current, holding current and latching current versus junction temperature

ng Quantity

Inches	
Min.	Max.

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which