Z00607 Series 0.8A TRIACs

DESCRIPTION:

This device is suitable for low power AC switching application, phase control application such as fan speed and temperature modulation control, lighting control and static switching relay.

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	0.8	A
V_{DRM}/V_{RRM}	600	V
V_{TM}	≤1.50	V

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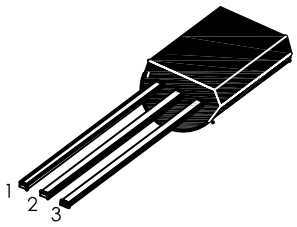
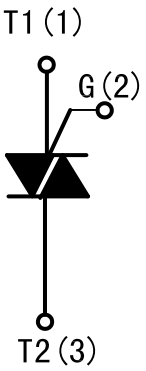


Symbol



ABSOLUTE MAXIMUM RATINGS

Parameter		Symbol	Value	Unit
Storage junction temperature range Operrating junction temperature range		Tstg Tj	-40 to +150 -40 to +110	℃
Repetitive Peak Off-state Voltage Repetitive Peak Reverse Voltage	Tj=25℃	V_{DRM} V_{RRM}	600 600	V
Non repetitive Surge Peak Off-state Voltage Non repetitive Peak Reverse Voltage	Tj=25℃	V_{DSM} V_{RSM}	700 700	V
RMS on-state current (full sine wave)	Tc=50℃	$I_{T(RMS)}$	0.8	A
Non repetitive surge peak on-state current (full cycle,Tj=25℃)	f = 50 Hz t=20ms f = 60 Hz t=16.7ms	I_{TSM}	9 9.5	A
I^2t Value for fusing	tp=10ms	I^2t	0.45	A^2s
Peak gate current	tp=20us, Tj=110℃	I_{GM}	1.0	A
Peak gate power dissipation	Tj=110℃	P_{GM}	1.0	W
Average gate power dissipation	Tj=110℃	$P_{G(AV)}$	0.1	W

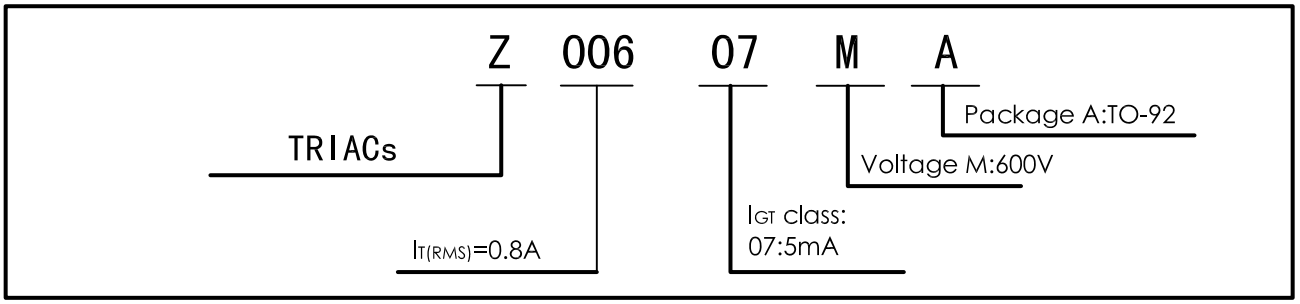
ELECTRICAL CHARACTERISTICS(Tj=25℃ unless otherwise specified)

Symbol	Test Condition		Quadrant	Ratings			Unit
				Min.	Typ.	Max.	
V_{TM}	I_T=1.1A, tp=380 us			--	--	1.5	V
I_{GT}	V_D=12V R_L=30Ω		T_2 + G +	--	--	5	mA
			T_2 + G -	--	--	5	
			T_2 - G -	--	--	5	
			T_2 - G +	--	--	7	
V_{GT}	V_D=12V R_L=30Ω		T_2 + G +	--	--	1.3	V
			T_2 + G -	--	--	1.3	
			T_2 - G -	--	--	1.3	
			T_2 - G +	--	--	1.3	
I_L	I_G=1.2I_{GT}		T_2 + G +	--	--	10	mA
			T_2 + G -	--	--	20	
			T_2 - G -	--	--	10	
			T_2 - G +	--	--	10	
I_H	I_T=100 mA		ALL	--	--	5	mA
V_{GD}	V_D=1/2V_{DRM} R_L=3.3KΩ Tj=125℃			0.2	--	--	V
dV/dt	V_D=67%V_{DRM} gate open Tj=110℃			20	--	--	V/uS
I_{DRM}	V_D=V_{DRM}	Tj=25℃		--	--	5	uA
I_{RRM}	V_R=V_{RRM}	Tj=110℃		--	--	100	uA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	Junction to case (AC)	60	℃/W

ORDERING INFORMATION



PACKAGE MECHANICAL DATA

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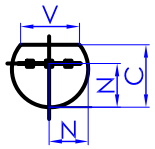
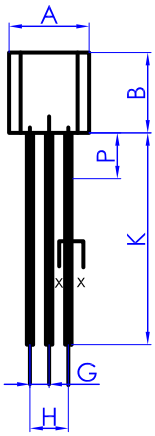


SECTION X-X



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Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.45	5.2	0.175	0.205
B	4.32	5.33	0.170	0.210
C	3.18	4.19	0.125	0.165
D	0.407	0.533	0.016	0.021
G	1.15	1.39	0.045	0.055
H	2.42	2.66	0.095	0.105
J	0.39	0.50	0.015	0.020
K	12.70	-	0.500	-
N	2.04	2.66	0.080	0.105
P	-	2.54	-	0.100
V	3.43	-	0.135	-

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

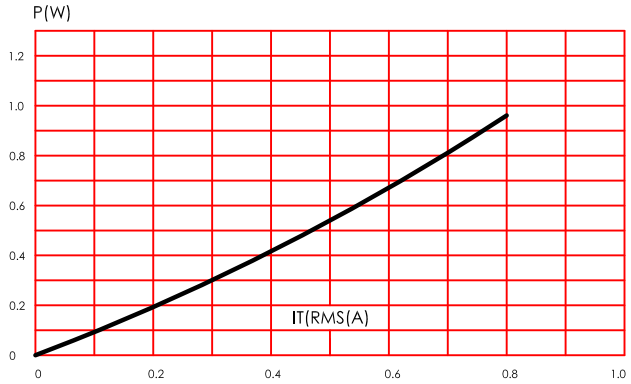

FIG.2: RMS on-state current versus case temperature(full cycle)

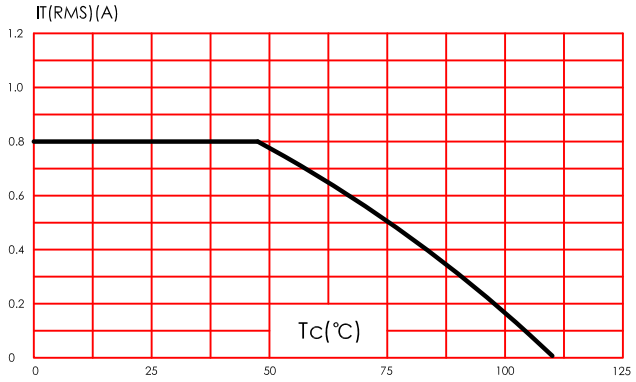

FIG.3: On-state characteristics (maximum values)

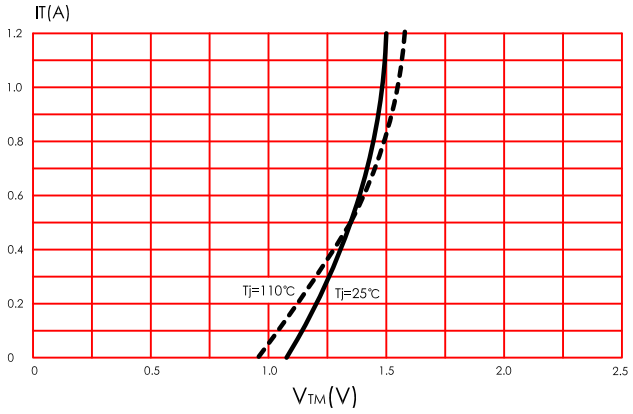

FIG.4: Surge peak on-state current versus number of cycles.

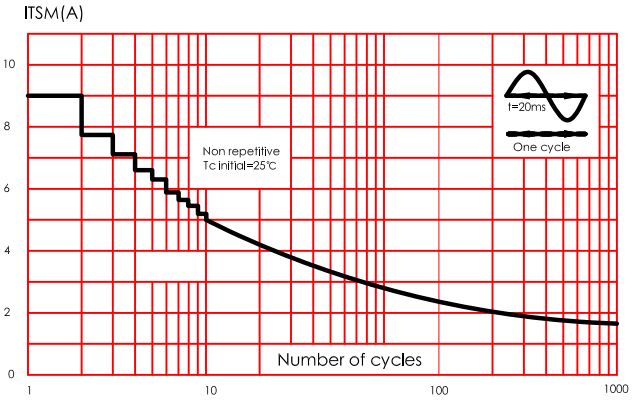

FIG.5: Relative variation of gate trigger current,holding current and latching current versus junction temperature(typical values).