

Z04xxxF

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
Rth(j-a)	Junction to ambient	100	°C/W
Rth(j-c)	Junction to case for D.C	10	°C/W
Rth(j-c)	Junction to case for A.C 360°conduction angle (F=50Hz)	7.5	°C/W

GATE CHARACTERISTICS

$P_G (AV) = 0.2 \text{ W max.}$ $P_{GM} = 3 \text{ W max. (tp = 20 } \mu\text{s)}$ $I_{GM} = 1.2 \text{ A max. (tp = 20 } \mu\text{s)}$

$V_{GD} = 0.2 \text{ Vmin. (V}_D = V_{DRM} \text{ } R_L = 3.3 \text{ k}\Omega \text{ } T_j = 125^\circ\text{C)}$

ELECTRICAL CHARACTERISTICS

Symbol	Test Conditions		Quadrant		Sensitivity				Unit
					02	05	09	10	
I _{GT}	V _D =12V (DC) R _L =33Ω	T _j = 25°C	I-II-III-IV	MAX	3	5	10	25	mA
V _{GT}	V _D =12V (DC) R _L =33Ω	T _j = 25°C	I-II-III-IV	MAX	1.5				V
I _H *	I _T = 50 mA Gate open	T _j = 25°C		MAX	3	5	10	25	mA
I _L	I _G = 1.2 I _{GT}	T _j = 25°C	I-III-IV	MAX	6	10	15	25	mA
			II	MAX	12	15	25	50	
V _{TM} *	I _{TM} = 5.5A tp=380μs	T _j = 25°C		MAX	2				V
I _{DRM} I _{RRM}	V _D = V _{DRM} V _R = V _{RRM}	T _j = 25°C		MAX	5				μA
		T _j = 110°C		MAX	200				
dV/dt *	V _D =67%V _{DRM} Gate open	T _j = 110°C		MIN	10	20	100	200	V/μs
(dV/dt)c *	(dI/dt)c= 1.3 A/ms	T _j = 110°C		MIN	0.5	1	2		V/μs
	(dI/dt)c= 1.8 A/ms	T _j = 110°C		MIN				5	V/μs

* For either polarity of electrode A_2 voltage with reference to electrode A_1

ORDERING INFORMATION

Z 04 05 M F				
TRIAC TOP GLASS	CURRENT	SENSITIVITY	VOLTAGE	PACKAGE : F=TO202-3

Fig.1 : Maximum RMS power dissipation versus RMS on-state current.

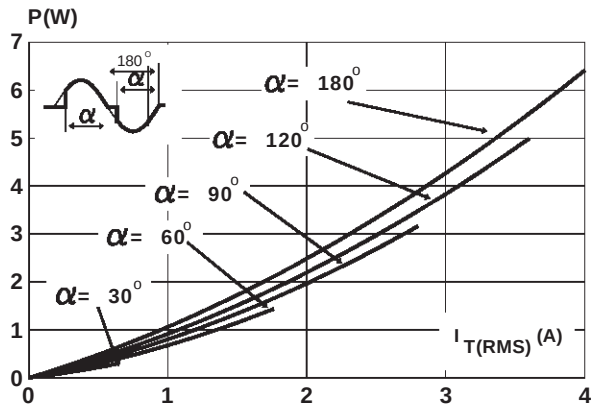


Fig.2 : Correlation between maximum RMS power dissipation and maximum allowable temperature (T_{amb} and T_{case}).

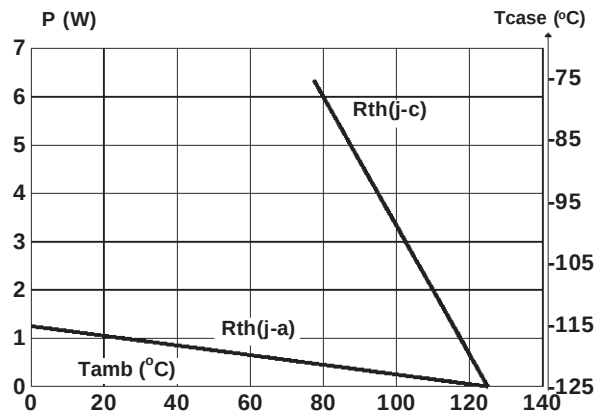


Fig.3 : RMS on-state current versus case temperature.

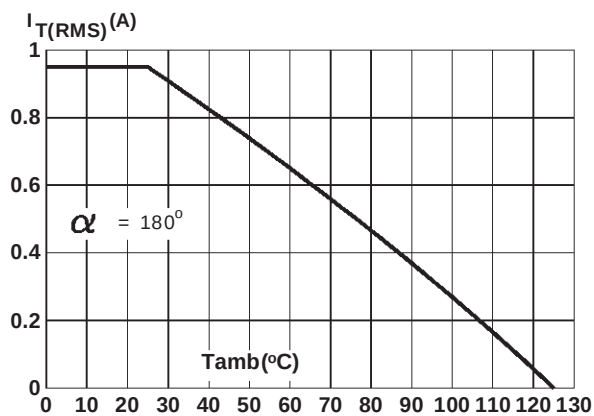


Fig.4 : Relative variation of thermal impedance junction to ambient versus pulse duration.

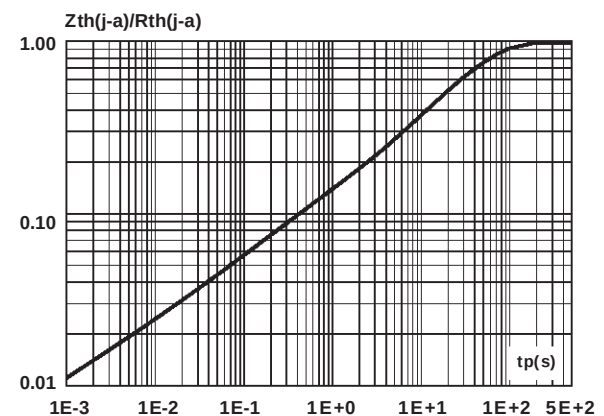


Fig.5 : Relative variation of gate trigger current and holding current versus junction temperature.

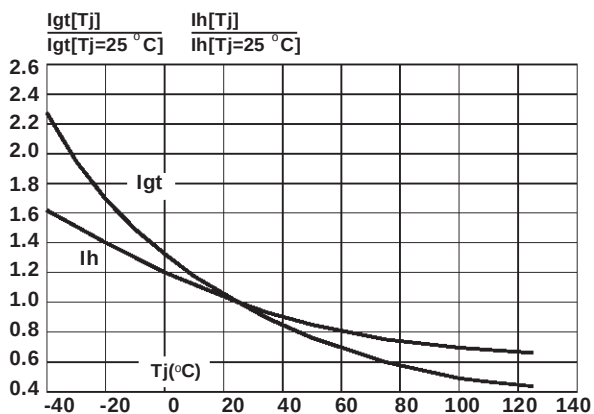
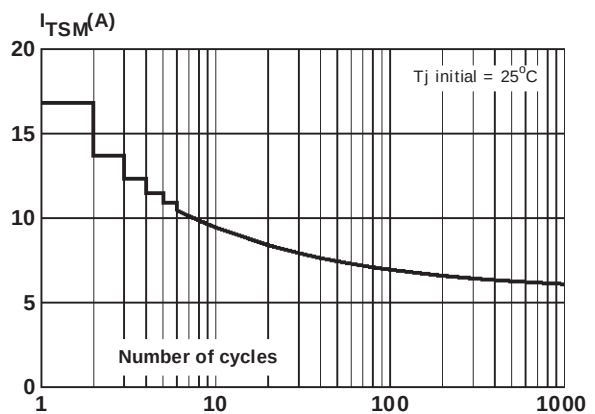


Fig.6 : Non repetitive surge peak on-state current versus number of cycles.



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Fig.7 : Non repetitive surge peak on-state current for a sinusoidal pulse with width : $t_p \leq 10\text{ms}$, and corresponding value of I^2t .

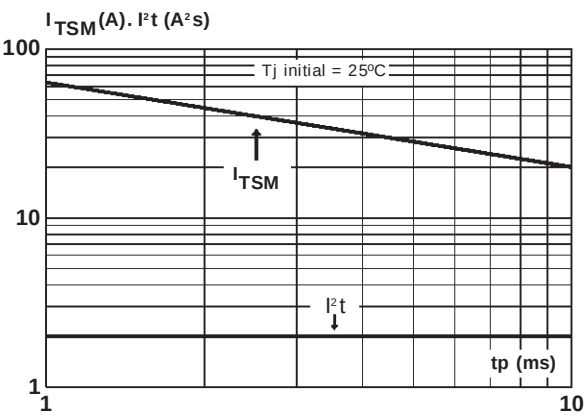
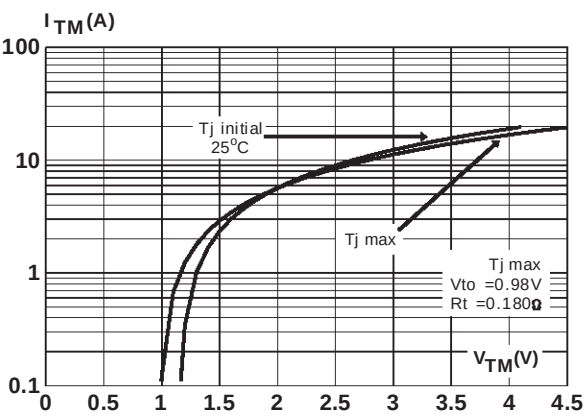
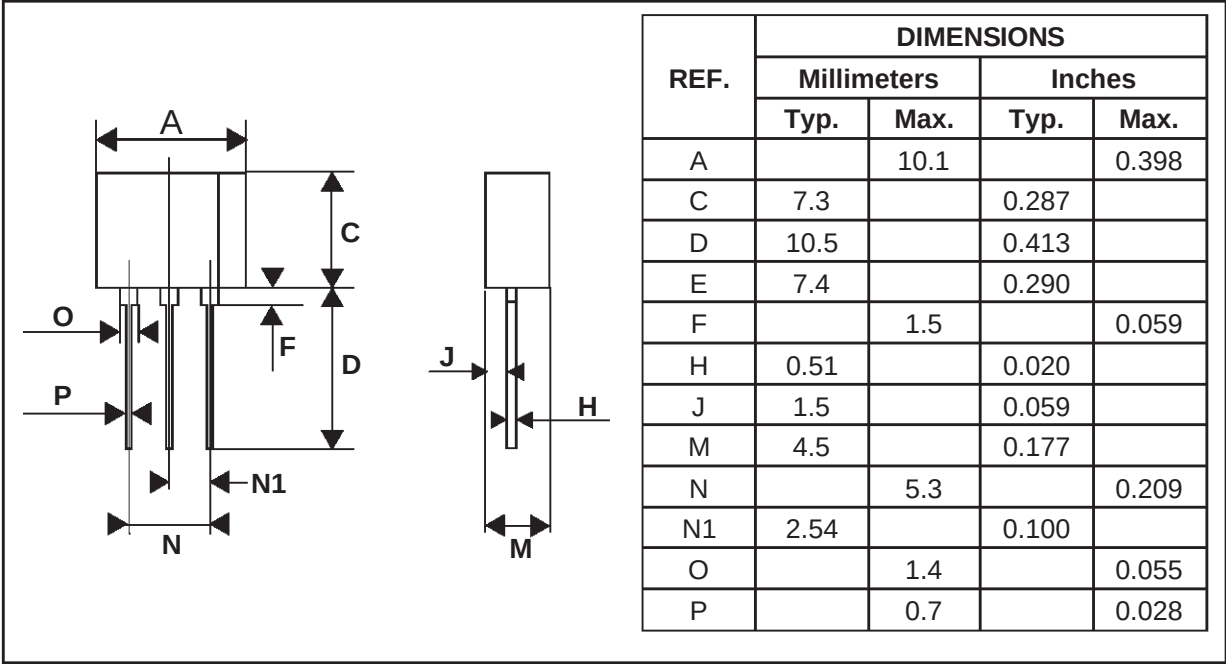


Fig.8 : On-state characteristics(maximum values).



PACKAGE MECHANICAL DATA
TO202-3 (Plastic)



Marking : type number
Weight : 1 g

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