



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Schottky barrier diode

RSX1001T3

●Applications

Switching power supply

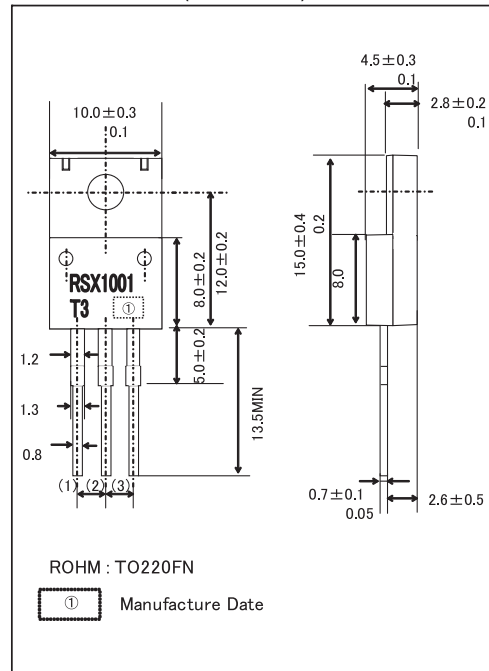
●Features

- 1) Cathode common type.
(TO-220)
- 2) Low I_R
- 3) High reliability

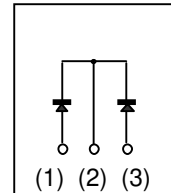
●Construction

Silicon epitaxial planer

●Dimensions (Unit : mm)



●Structure



●Absolute maximum ratings (Ta=25°C)

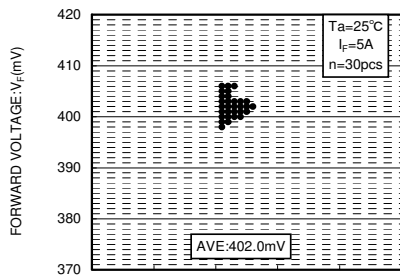
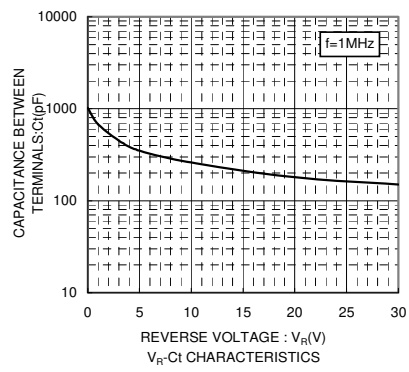
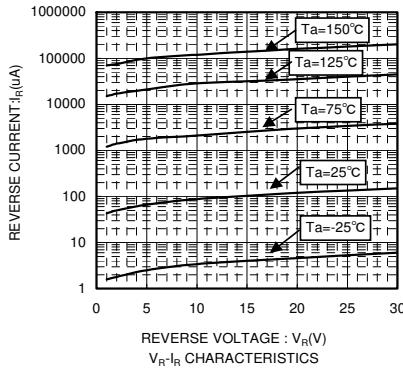
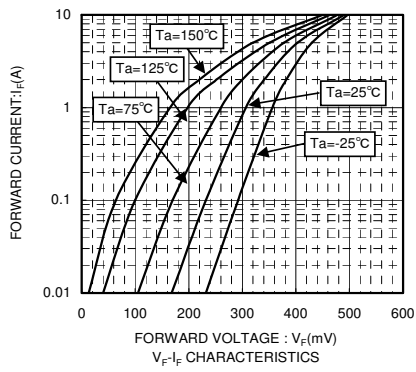
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	30	V
Reverse voltage (DC)	V_R	30	V
Average rectified forward current (*1)	I_o	10	A
Forward current surge peak (60Hz / 1cyc) (*1)	I_{FSM}	150	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40 to +150	°C

(*1)Business frequencies, Rating of R-load, 1/2 I_o per diode, $T_c=132^\circ\text{C}$

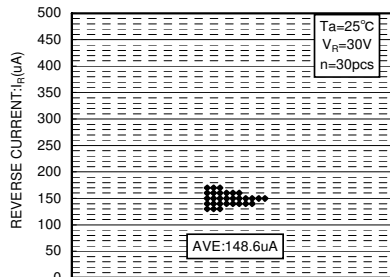
●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.45	V	$I_F=5\text{A}$
Reverse current	I_R	-	-	500	μA	$V_R=30\text{V}$
Reverse recovery time	θ_{jc}	-	-	2.5	°C/W	junction to case

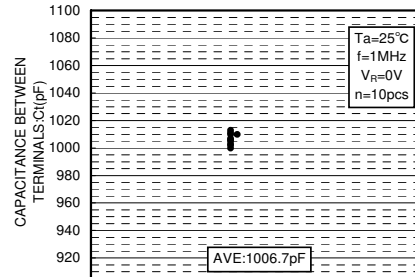
●Electrical characteristic curves



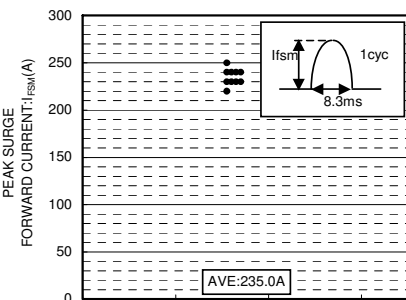
V_F DISPERSION MAP



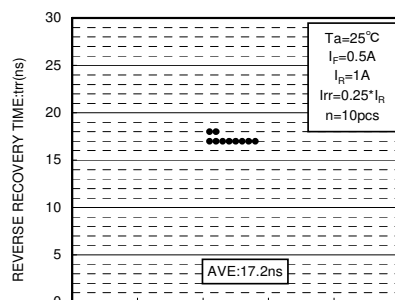
I_R DISPERSION MAP



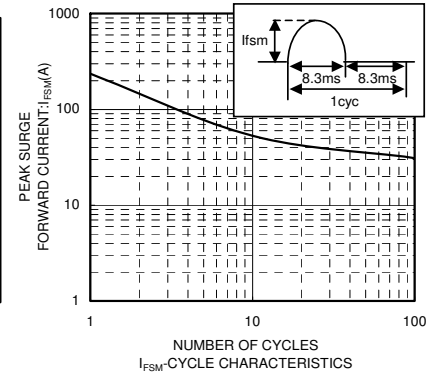
C_t DISPERSION MAP



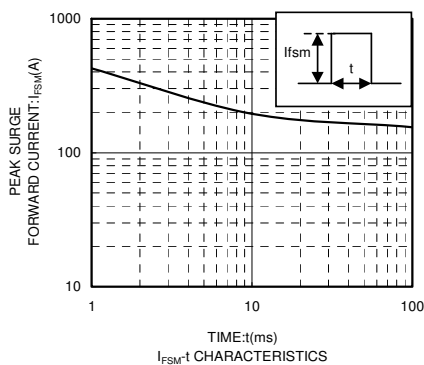
I_{FSM} DISPERSION MAP



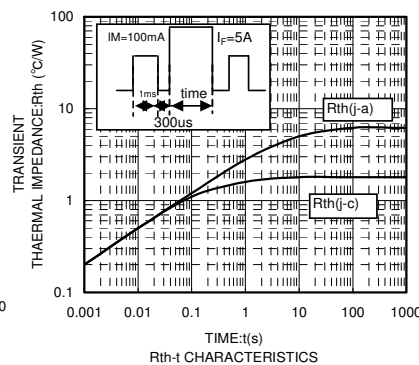
t_{rr} DISPERSION MAP



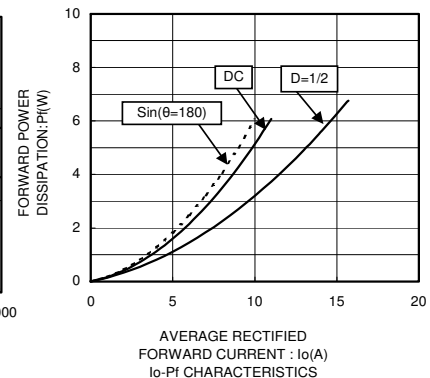
I_{FSM} CYCLE CHARACTERISTICS



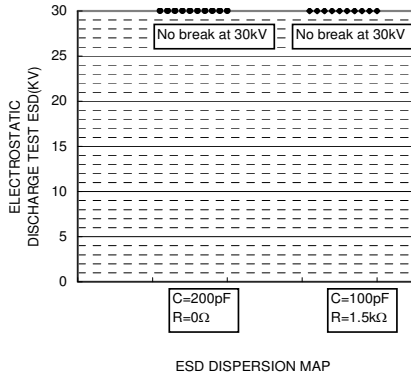
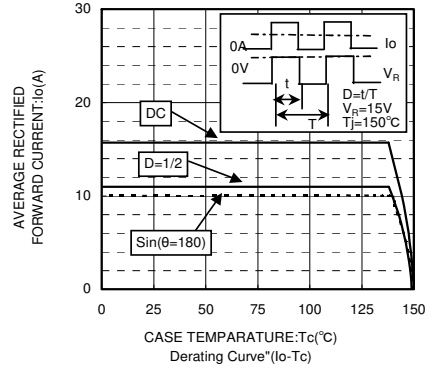
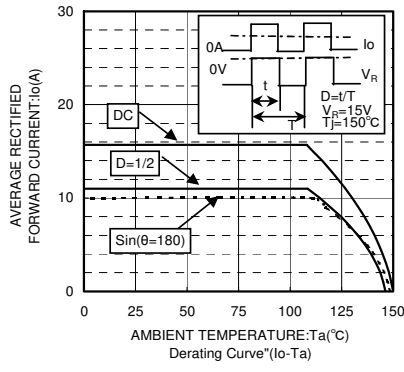
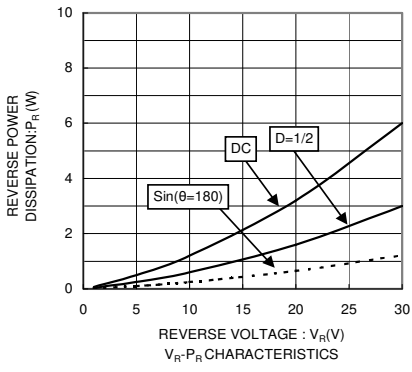
I_{FSM} - t CHARACTERISTICS



R_{th} - t CHARACTERISTICS



AVERAGE RECTIFIED FORWARD CURRENT : I_o (A)
 I_o - P CHARACTERISTICS



Notes

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