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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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Fast recovery diode RF051UA1D

Applications

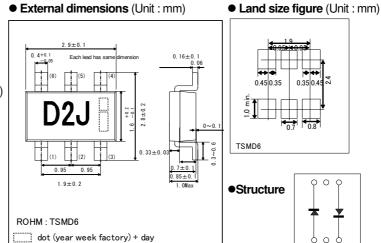
General rectification

●Features

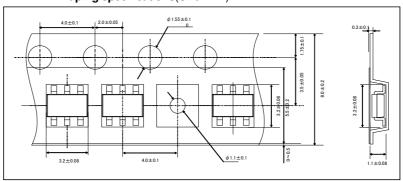
- 1) Small power mold type. (TSMD6)
- 2) Very fast recovery.
- 3) High reliability

Construction

Silicon epitaxial planar



• Taping specifications(Unit : mm)



● Absolute maximum ratings (Ta=25°C)

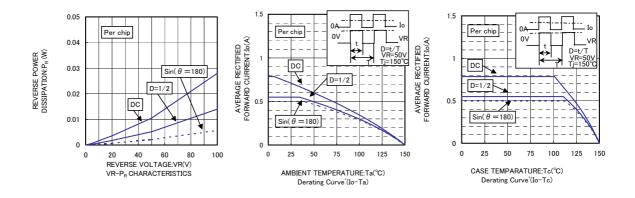
Parameter	Symbol	Limits	Unit			
Reverse voltage (repatitive peak)	V_{RM}	100	V			
Reverse voltage (DC)	V_R	100	V			
Average rectified forward current (*1)	lo	0.5	Α			
Forward current surge peak (60Hz-1cyc)	I _{FSM}	5	Α			
Junction temperature	Tj	150	°C			
Storage temperature	Tstg	-55 to +150	°C			

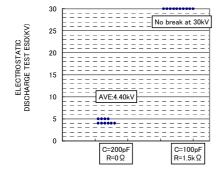
^(*1) Rating for a per diode

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V_{F}	-	-	0.98	V	I _F =0.5A
Reverse current	I_R	-	-	10	μΑ	V _R =100V
Reverse recovery time	trr	-	-	25	ns	I _F =0.5A,I _R =1A,Irr=0.25*I _R

●Electrical characteristic curves (Ta=25°C) 100000 音声記 REVERSE CURRENTIR(nA) で の の FORWARD CURRENT:IF(A) CAPACITANCE BETWEEN TERMINAL S:Ct(pF) 0.1 20 40 60 100 0 0 200 400 600 800 1000 1200 0 FORWARD VOLTAGE: VF(mV) REVERSE VOLTAGE: VR(V) REVERSE VOLTAGE:VR(V) VF-IF CHARACTERISTICS 910 Ta=25°C 900 Ta=25°C FORWARD VOLTAGE:VF(mV) IF=0.5A VR=100V REVERSE CURRENT:IR(nA) 900 800 f=1MHz CAPACITANCE BETWEEN TERMINALS:Ct(pF) 700 n=10pcs 890 600 500 400 300 AVE:3.13pF 100 860 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 1000 Ta=25°C IF=0.5A IR=1A RESERVE RECOVERY TIME:tm(ns) PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) rr=0.25*IR 20 8.3ms 8.3ms 30 15 10 AVE:11.6A 10 100 trr DISPERSION MAP IFSM DISRESION MAP NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS 1000 1000 Per chip TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) 0.8 DC PEAK SURGE FORWARD CURRENT:IFSM(A) D=1/2 100 100 FORWARD POWER DISSIPATION:Pf(W) 0.6 $Sin(\theta = 180)$ 0.4 10 0.2 0 10 TIME:t(ms) 1 1 TIME:t(s) 0 0.5 AVERAGE RECTIFIED Rth-t CHARACTERISTICS IFSM-t CHARACTERISTICS FORWARD CURRENT: Io(A) Io-Pf CHARACTERISTICS





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