Schottky barrier diode RB521S-30

Applications

Low current rectification

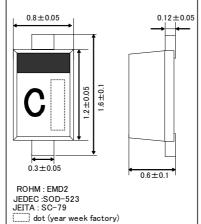
● Features

- 1) Ultra Small mold type. (EMD2)
- 2) Low V_F
- 3) High reliability.

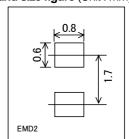
Construction

Silicon epitaxial planar

• External dimensions (Unit : mm)



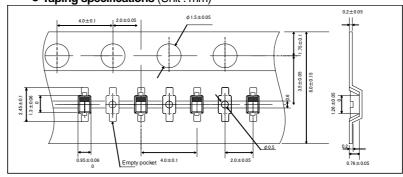
• Land size figure (Unit : mm)



Structure







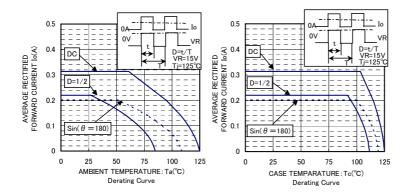
● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (DC)	V_R	30	V
Average rectified forward current	lo	200	mA
Forward current surge peak (60Hz · 1cyc)	I _{FSM}	1	Α
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-40 to +125	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V_{F}	-	-	0.50	V	I _F =200mA
Reverse current	I_R	-	-	30	μΑ	V _R =10V

●Electrical characteristic curves (Ta=25°C) 1000 100000 10000 100 FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(uA) CAPACITANCE BETWEEN TERMINALS:Ct(pF) 1000 100 10 10 **引Ta=−25℃** 0.1 0.01 0.01 0.001 0 10 20 0 0 200 300 400 REVERSE VOLTAGE: VR(V) FORWARD VOLTAGE: VF(mV) REVERSE VOLTAGE:VR(V) VR-IR CHARACTERISTICS VF-IF CHARACTERISTICS VR-Ct CHARACTERISTICS 50 450 45 Ta=25°C Ta=25°C f=1MHz VR=0V Ta=25°C IF=200mA VR=10V n=30pcs 40 FORWARD VOLTAGE:VF(mV) 18 440 CAPACITANCE BETWEEN n=10pcs TERMINALS:Ct(pF) n=10pcs 430 420 AVE:14.33pF 410 12 AVE:421.0mV 11 0 400 10 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 20 PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) 15 1cyc 10 AVE:5.60A 0 0 0 10 100 10 100 TIME:t(ms) IFSM-t CHARACTERISTICS NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS IFSM DISPERSION MAP 1000 0.2 0.5 TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) Rth(j-a) 0.4 0.15 REVERSE POWER DISSIPATIONP_R(w) FORWARD POWER DISSIPATION:Pf(W) D=1/2 Rth(j-c) 0.3 100 0.1 0.2 0.05 0.1 10 0 0.001 0 0.1 0.2 0.3 AVERAGE RECTIFIED FORWARD CURRENT: Io(A) 0 0.5 TIMF·(s) REVERSE VOLTAGE: VR(V) VR-P_R CHARACTERISTICS Rth-t CHARACTERISTICS Io-Pf CHARACTERISTICS



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