Schottky barrier diode RB160M-90

Applications

General rectification

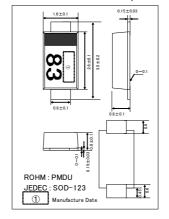
● Features

- 1) Small power mold type. (PMDU)
- 2) Low I_R
- 3) High reliability.

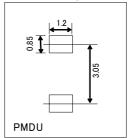
Construction

Silicon epitaxial planar

• External dimensions (Unit : mm)



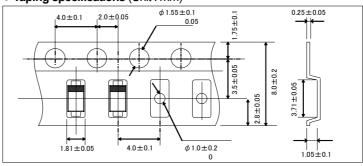
• Land size figure (Unit : mm)



●Structure



• Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	90	V
Reverse voltagec(DC)	V _R	90	V
Average rectified forward current	lo	1	А
Forward current surge peak (60Hz-1cyc)	I _{FSM}	30	A
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-40 to +150	°C

Mounted on epoxy board. 180° Harf sine wave

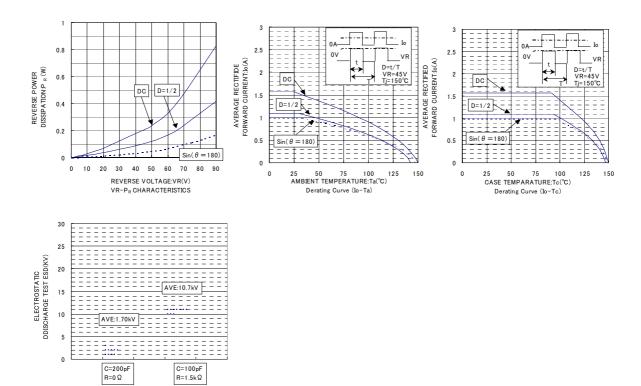
●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V_{F}	-	-	0.73	V	I _F =1.0A
Reverse current	I _R	-	-	100	μA	V _R =90V



●Electrical characteristic curves (Ta=25°C) Ta=150°C Ta=125°C 1000 1000 FORWARD CURRENT:IF(A) REVERSE CURRENT:IR(uA) Ta=25°C CAPACITANCE BETWEEN 100 TERMINALS:Ct(pF) Ta=25°C 0.01 0.1 0.001 0.01 500 600 20 30 40 50 60 70 10 15 20 0 100 400 700 0 REVERSE VOLTAGE:VR(V) REVERSE VOLTAGE: VR(V) FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS VR-IR CHARACTERISTICS VR-Ct CHARACTERISTICS 200 190 90 FORWARD VOLTAGE:VF(mV) 180 80 640 REVERSE CURRENT:IR(uA) TERMINALS:Ct(pF) 150 140 130 70 60 630 50 620 130 30 120 20 AVE:632.1mV 610 10 Baia E 100 0 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 100 200 Ta=25°C IF=0.5A RESERVE RECOVERY TIME:trn(ns) PEAK SURGE FORWARD CURRENT:IFSM(A) FORWARD CURRENTIFSM(A) Irr=0.25*IR n=10pcs 100 50 AVE:56.0A 10 NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS trr DISPERSION MAP IFSM DISRESION MAP 150 1000 TRANSIENT AL IMPEDANCE:Rth (°C/W) PEAK SURGE FORWARD CURRENT:IFSM(A) FORWARD POWER DISSIPATION:Pf(W) 50 THAERMAL 0 0.1 0.1 0.001 1000 TIME:t(s) TIME:t(ms) AVERAGE RECTIFIED Rth-t CHARACTERISTICS FORWARD CURRENT: Io(A) Io-Pf CHARACTERISTICS

ESD DISPERSION MAP



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