Schottky barrier diode RB400VA-50

Applications

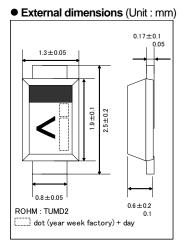
General rectification

● Features

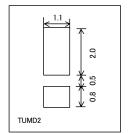
- 1) Small mold type. (TUMD2)
- 2) Low I_F, Low I_R.
- 3) High reliability.

Construction

Silicon epitaxial planar

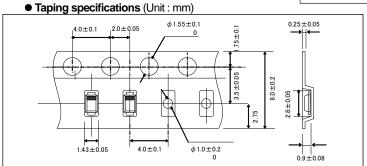


• Land size figure (Unit : mm)



●Structure





●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	50	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	lo	0.5	Α
Forward current surge peak (60Hz-1cyc)	I _{FSM}	3	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 1	-	-	0.55	V	I _F =500mA
Reverse current	I _R 1	-	-	30	μΑ	V _R =10V
	I _R 2	-	-	50	μA	V _R =30V
Capacitance between terminal	Ct1	-	125	-	pF	V _R =0V , f=1MHz
	Ct2	-	20	-	pF	V _R =10V , f=1MHz

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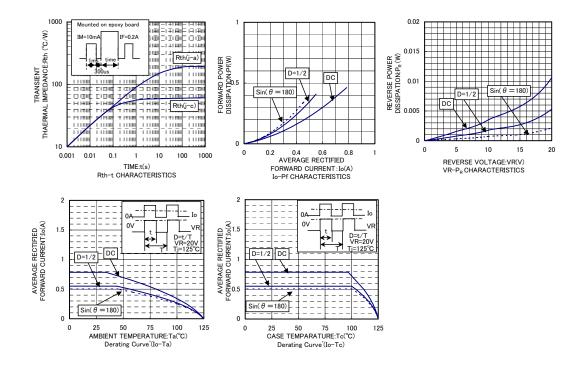
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●Electrical characteristic curves (Ta=25°C) 10000 1000 1000 100 CAPACITANCE BETWEEN TERMINALS:CK(pF) FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(uA) 10 0.1 0.1 0.01 10 15 20 25 30 35 10 15 20 REVERSE VOLTAGE:VR(V) 0 200 400 600 0 REVERSE VOLTAGE: VR(V) FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS VR-IR CHARACTERISTICS VR-Ct CHARACTERISTICS 520 Ta=25°C Ta=25°C VR=35V FORWARD VOLTAGE:VF(mV) 510 REVERSE CURRENT:IR(uA) 500 490 480 AVE:495.8mV **E BIB.**E 470 IR DISPERSION MAP VF DISPERSION MAP IR DISPERSION MAP 200 Ta=25°C 190 Ta=25°C 24 f=1MHz 180 VR=0V 23 VR=10V CAPACITANCE BETWEEN TERMINALS:Ct(pF) n=10pcs 22 21 20 18 120 AVE:20.66pF 16 AVE:5.30A 100 Ct DISPERSION MAP Ct DISPERSION MAP IFSM DISRESION MAP 20 Ta=25°C IF=0.5A RESERVE RECOVERY TIME:tm(ns) IR=1A PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:FSM(A) 15 Irr=0.25*IR 10 100 10 TIME:t(ms) NUMBER OF CYCLES trr DISPERSION MAP

IFSM-CYCLE CHARACTERISTICS

IFSM-+ CHARACTERISTICS



Rev.A

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