Schottky barrier diode **RB520G-30**

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787

Applications

Low current rectification

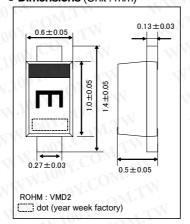
Features

- 1) Ultra Small mold type. (VMD2)
- 2) Low I_R.
- 3) High reliability.

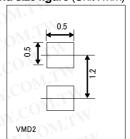
Construction

Silicon epitaxial planar

Dimensions (Unit : mm)



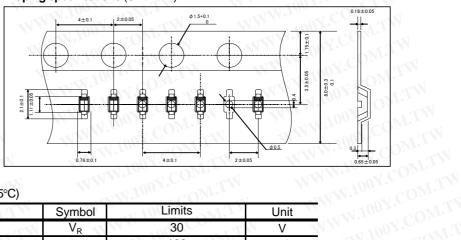
• Land size figure (Unit : mm)



Structure



• Taping specifications (Unit : mm)



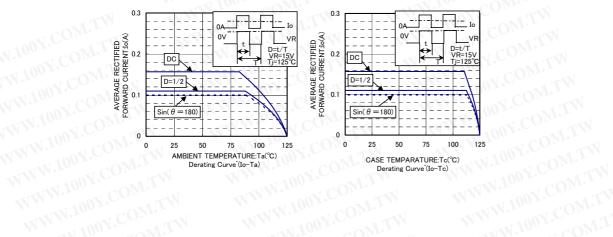
Absolute maximum ratings (Ta=25°C)

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Parameter	Symbol	Limits	Unit
Reverse voltage(DC)	V_R	30	V
Average rectified forward current	lo	100	mA
Forward current surge peak (60Hz • 1cyc)	I_{FSM}	500	mA
Junction temperature	N Tj	125	JV °C
Storage temperature	Tstg	-40 to +125	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Forward voltage	V_{F}	COM		0.45	V	I _F =10mA	W. Too
Reverse current	I _R	· · ·	177	0.5	μА	V _R =10V	A

●Electrical characteristic curves (Ta=25°C) Ta=125°C 100000 FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(nA) 10000 1000 100 0.1 0.01 0.1 0.001 0 20 0 5 10 REVERSE VOLTAGE:VR(V) 0 FORWARD VOLTAGE: VF(mV) REVERSE VOLTAGE: VR(V) VF-IF CHARACTERISTICS VR-IR CHARACTERISTICS VR-Ct CHARACTERISTICS Ta=25°C VF=10mA Ta=25°C VR=10V n=30pcs 900 Ta=25°C 360 18 f=1MHz n=30pcs CAPACITANCE BETWEEN VR=0V n=10pcs 350 12 330 VF DISPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 10 PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) 8.3ms 8.3ms 1cyc 10 - AVE:4.20A 0 10 10 NUMBER OF CYCLES IFSM-CYCLE CHARACTERISTICS TIMF:t(ms) 0.02 TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) 0.08 0.015 REVERSE POWER DISSIPATION: PR (W) FORWARD POWER DISSIPATION: Pf(W) Rth(j-c) 0.06 0.01 0.04 0.02 10 0.05 0.1 0.15 AVERAGE RECTIFIED FORWARD CURRENT: Io(A) Io-Pf CHARACTERISTICS 0.001 0 15 20 10 TIMF+(s) REVERSE VOLTAGE:VR(V) VR-P_R CHARACTERISTICS Rth-t CHARACTERISTICS



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