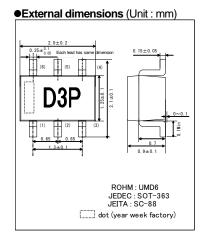
Schottky barrier diode RB731XN

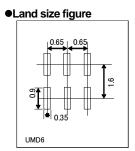
Applications

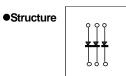
General rectification

● Features

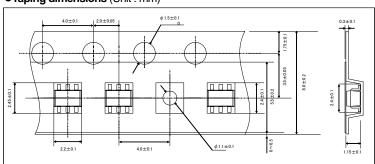
- Small power mold type. (UMD6)
- 2) Low V_F
- 3) High reliability







●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	VRM	40	V
Reverse voltage (DC)	VR	40	V
Average rectified forward current *	lo	30	mA
Forward current surge peak (60Hz ·1cyc.)*	IFSM	200	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-40 to +125	°C

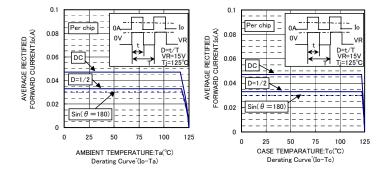
^{*} Rating for each diode Io/3

●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	VF	_	-	0.37	V	I=1mA
Reverse current	IR	_	_	1	μΑ	V _R =10V
Capacitance between terminal	Ct	_	2	_	pF	V _R =1V, f=1MHz

Electrical characteristic curves 1000 f=1MHz Ta=125°C 100 FORWARD CURRENT:IF(mA) REVERSE CURRENT:IR(uA) CAPACITANCE BETWEEN TERMINALS:Ct(pF) 10 10 0.1 0.1 0.01 0.001 0.1 10 0 20 15 20 30 FORWARD VOLTAGE: VF(mV) VF-IF CHARACTERISTICS REVERSE VOLTAGE: VR(V) VR-IR CHARACTERISTICS REVERSE VOLTAGE:VR(V) VR-Ct CHARACTERISTICS 300 Ta=25°C VR=10V Ta=25°C 0.9 Ta=25°C FORWARD VOLTAGE:VF(mV) f=1MHz VR=0V REVERSE CURRENT IR(nA) 0.8 290 CAPACITANCE BETWEEN TERMINALS:Ct(pF) n=30pcs 0.7 n=10pc 6 280 0.6 0.5 0.4 270 0.3 3 260 0.2 AVE:2.52pF AVE:267.4mV 0.1 250 0 VF DIPERSION MAP IR DISPERSION MAP Ct DISPERSION MAP 20 PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE FORWARD CURRENT:IFSM(A) PEAK SURGE 10 5 4 3 5 2 AVE:7.30A 0 0 100 10 TIME:t(ms) 100 NUMBER OF CYCLES IFSM DISPERSION MAP IFSM-CYCLE CHARACTERISTICS IFSM-t CHARACTERISTICS 1000 0.003 0.04 TRANSIENT THAERMAL IMPEDANCE:Rth (°C/W) Rth(j-a FORWARD POWER DISSIPATION:Pf(W) 0.00 0.01 REVERSE POWER DISSIPATION:P_R(W) 0.002 Rth(i $Sin(\theta = 180)$ Mounted on epoxy boa 10 0.001 0.01 0.00 0.04 0.01 0.02 0.03 0.05 0.001 0.1 1000 0.00 0 10 30 TIME:t(s) Rth-t CHARACTERISTICS AVERAGE RECTIFIED FORWARD CURRENT Io(A) Io-Pf CHARACTERISTICS REVERSE VOLTAGE:VR(V)





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