Schottky Barrier Diode

RB751VM-40FH Datasheet

AEC-Q101 Qualified

●Application

High speed switching

●Features

1) Ultra small mold type. (UMD2)

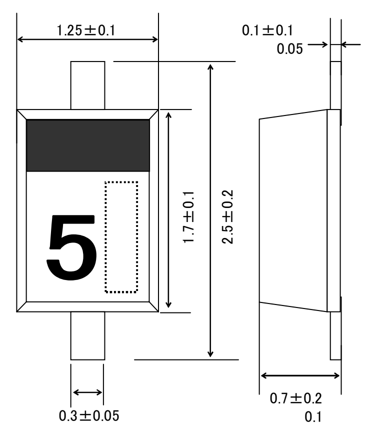
2) Low I_R

3) High reliability

●Construction

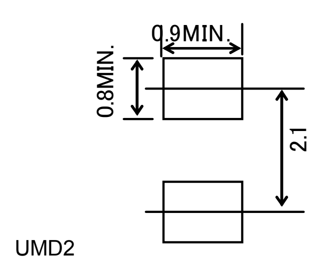
Silicon epitaxial planar

●Dimensions (Unit : mm)

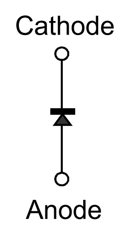


ROHM : UMD2 JEITA : SC-90/A
JEDEC :SOD-323 ⬚ dot (year week factory)

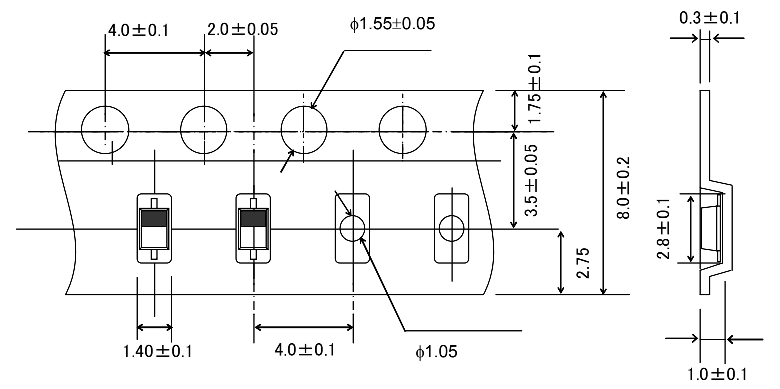
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



●Absolute maximum ratings (Ta= 25°C)

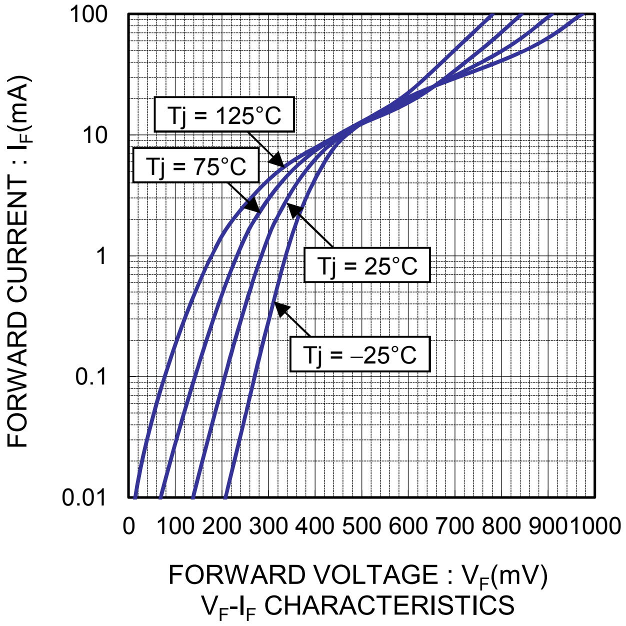
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	40	V
Reverse voltage (DC)	V_R	30	V
Average rectified forward current	Io	30	mA
Forward current surge peak (60Hz･1cyc)	I_{FSM}	200	mA
Junction temperature	Tj	150	°C
Storage temperature	Tstg	−40 to +150	°C

●Electrical characteristics (Ta = 25°C)

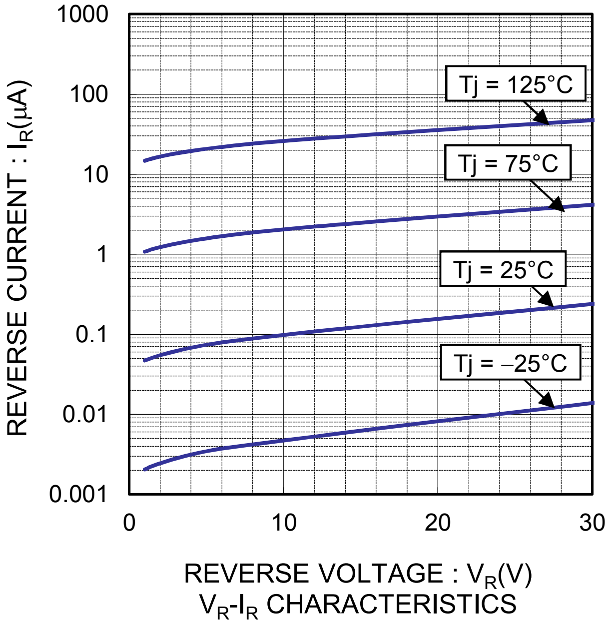
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.37	V	I_F=1mA
Reverse current	I_R	-	-	0.5	μA	V_R=30V
Capacitance between terminals	Ct	-	2	-	pF	V_R=1V , f=1MHz

© 2015 ROHM Co., Ltd. All rights reserved.

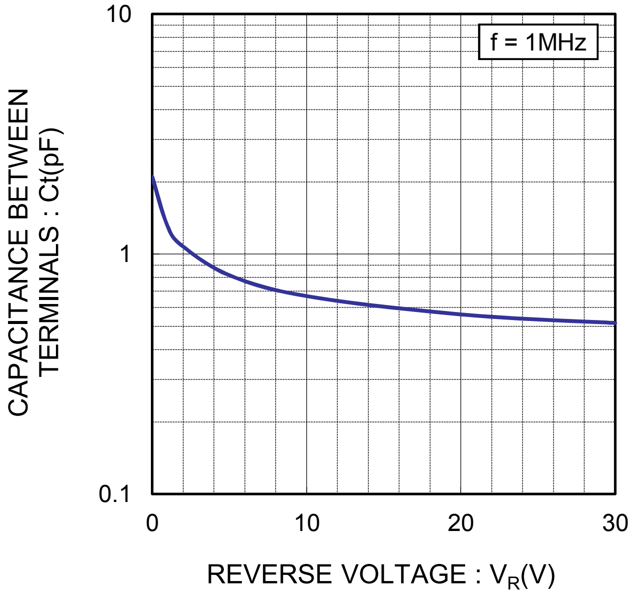
●Electrical characteristic curves



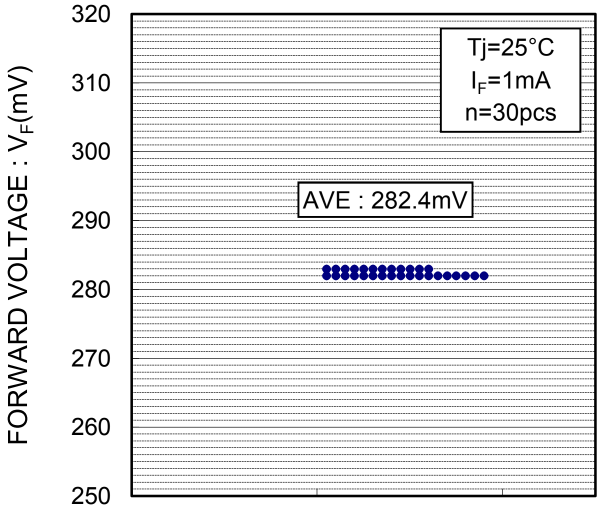
V_F-I_F CHARACTERISTICS



V_R-I_R CHARACTERISTICS



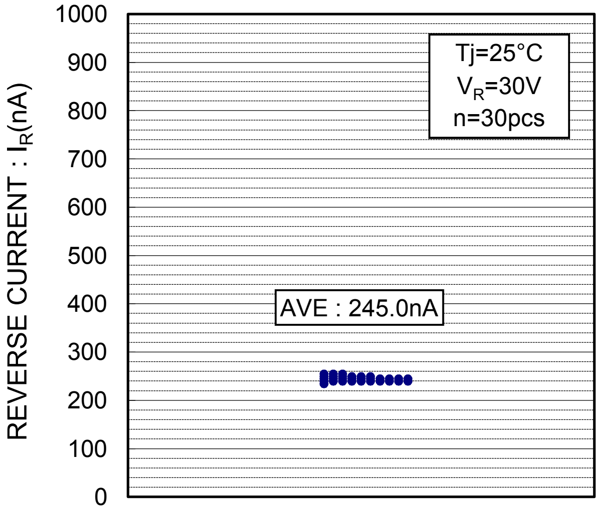
V_R-Ct CHARACTERISTICS



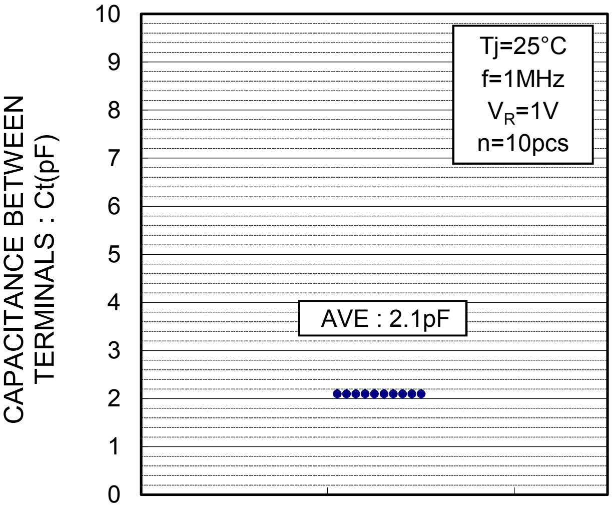
V_F DISPERSION MAP

© 2015 ROHM Co., Ltd. All rights reserved.

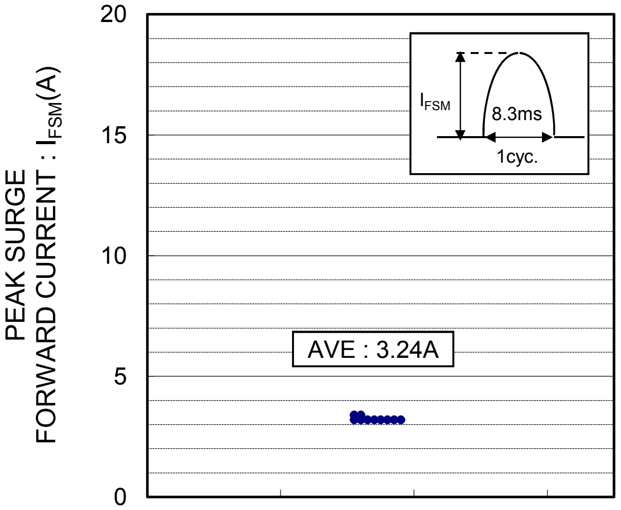
●Electrical characteristic curves



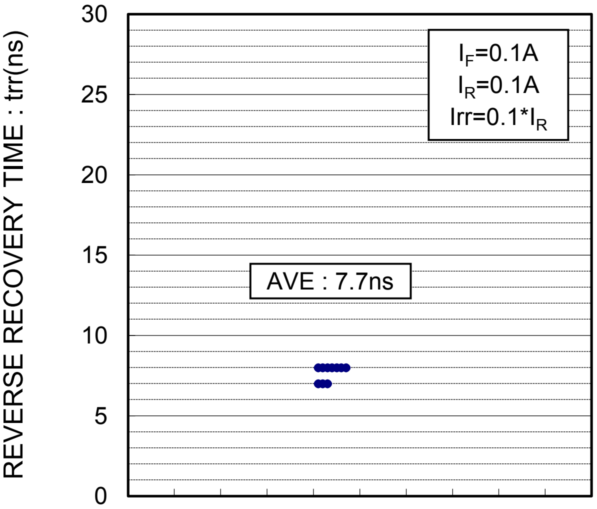
I_R DISPERSION MAP



Ct DISPERSION MAP



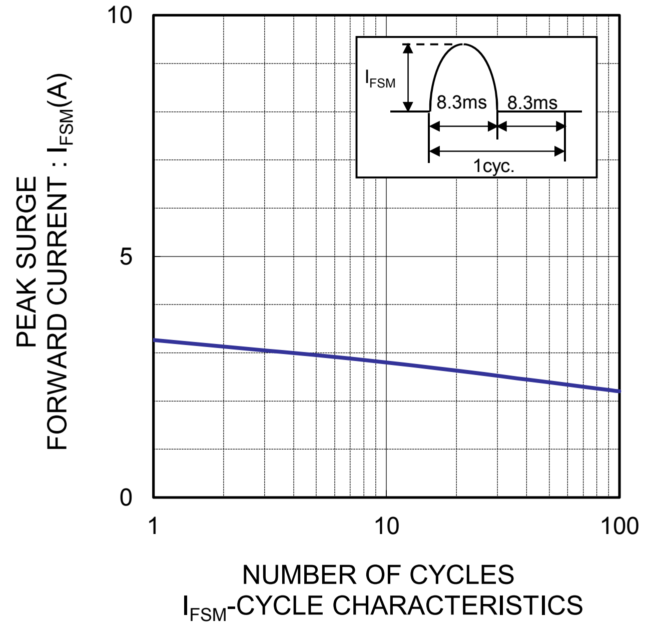
I_{FSM} DISPERSION MAP



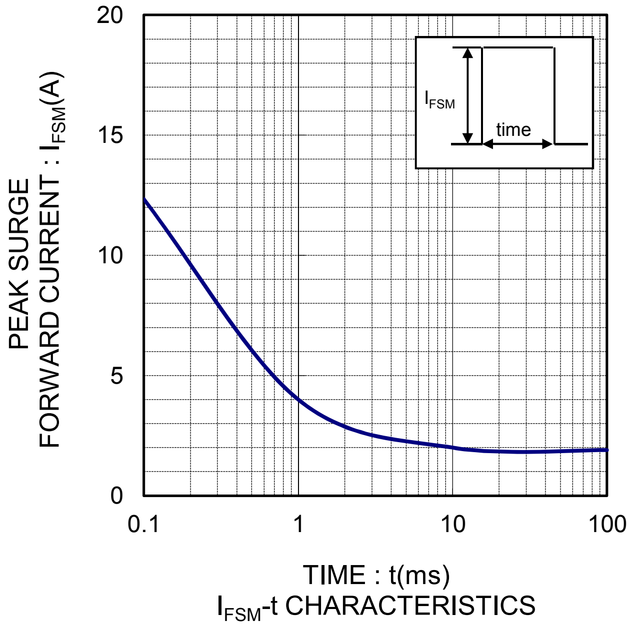
trr DISPERSION MAP

© 2015 ROHM Co., Ltd. All rights reserved.

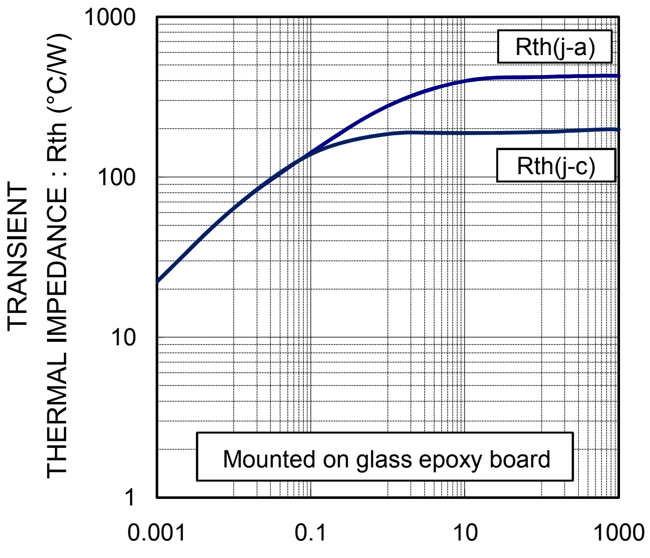
●Electrical characteristic curves



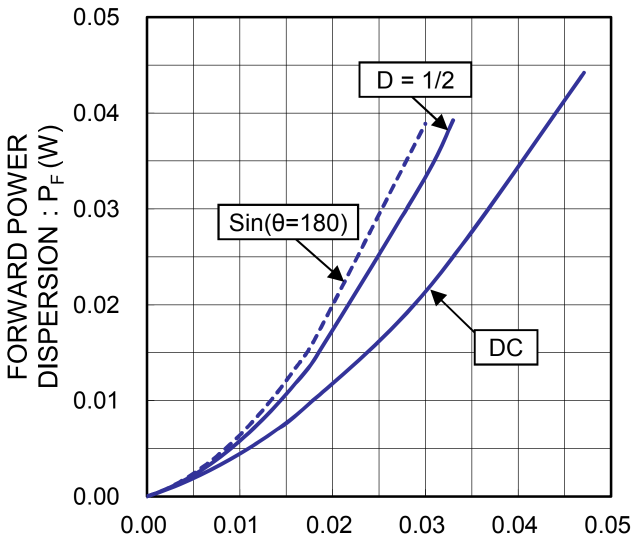
NUMBER OF CYCLES
I_{FSM}-CYCLE CHARACTERISTICS



TIME : t(ms)
I_{FSM}-t CHARACTERISTICS

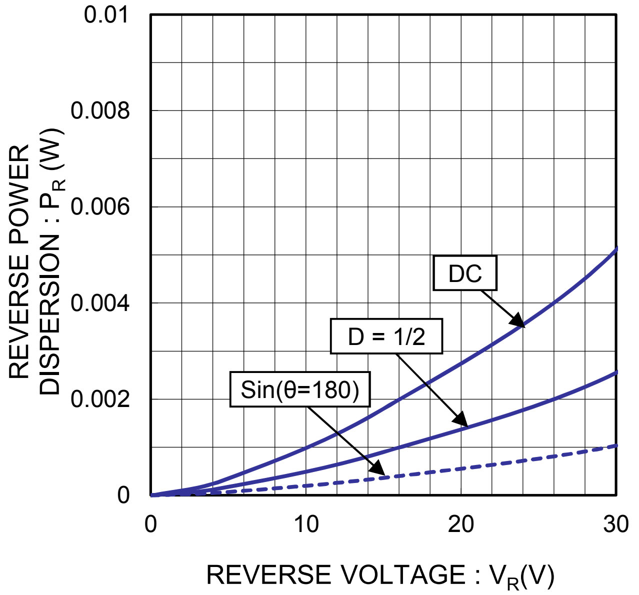


TIME : t(s)
Rth-t CHARACTERISTICS

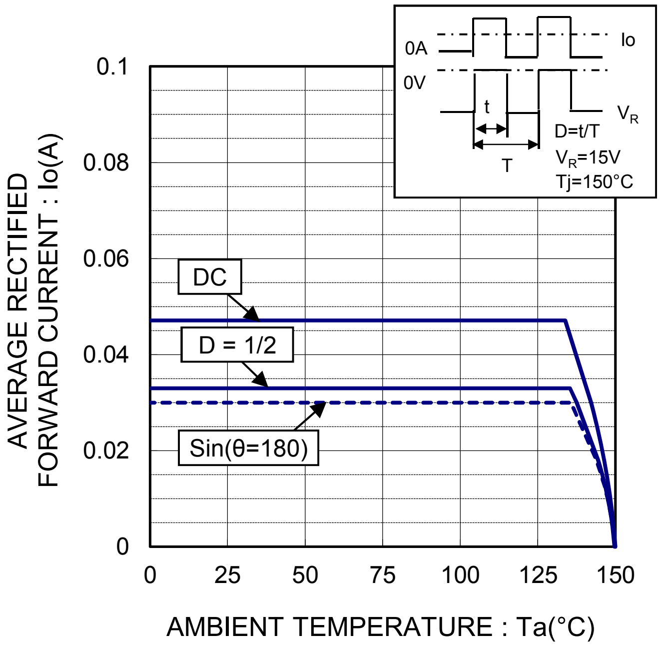


AVERAGE RECTIFIED FORWARD CURRENT : Io(A)
Io-P_F CHARACTERISTICS

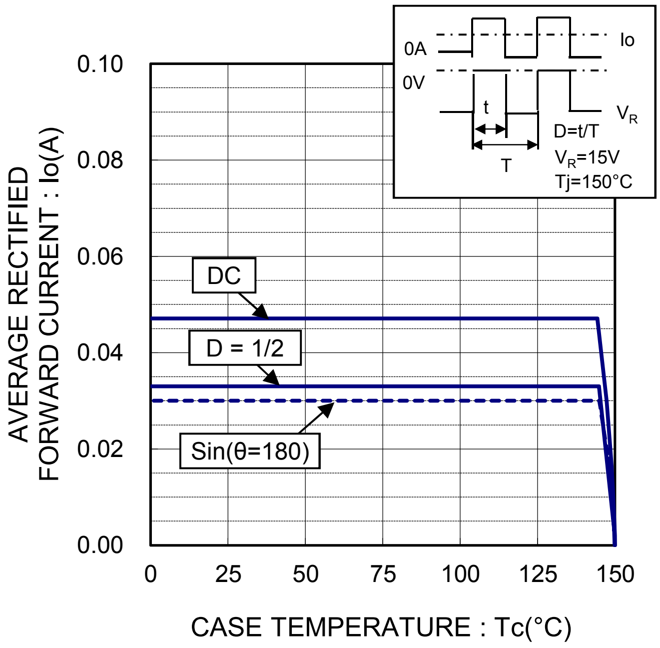
●Electrical characteristic curves



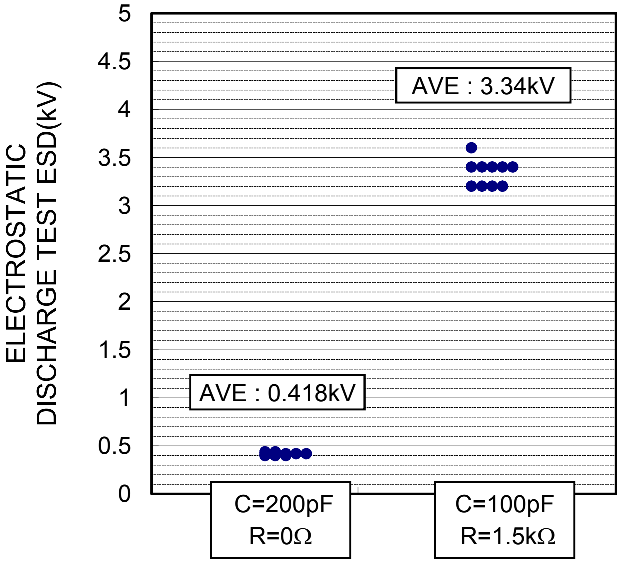
V_R-P_R CHARACTERISTICS



DERATING CURVE (Io-Ta)



DERATING CURVE (Io-Tc)



ESD DISPERSION MAP