Schottky barrier diode

RB050LA-40

●**Applications**

General rectification

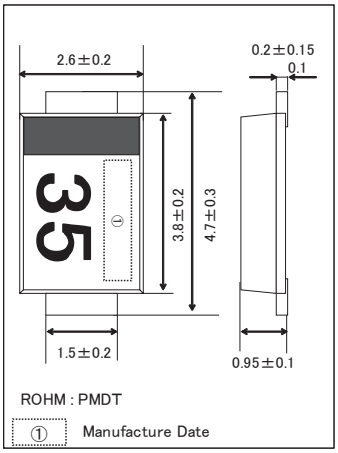
●**Features**

1) Small power mold type (PMDT)
2) Low I_R
3) High reliability

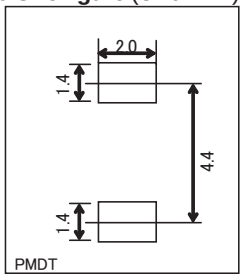
●**Structure**

Silicon epitaxial planer

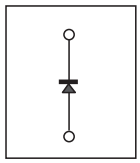
●**External dimensions** (Unit : mm)



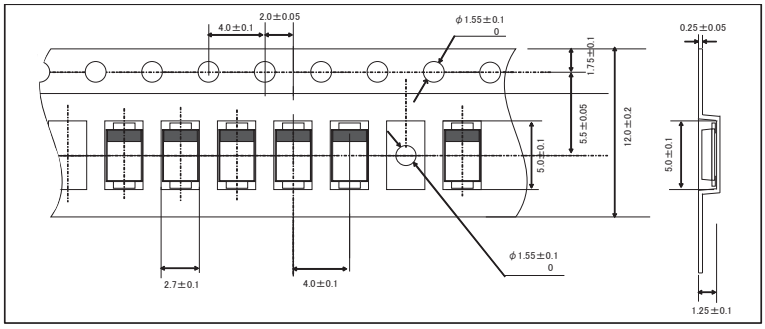
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping dimensions** (Unit : mm)



●**Absolute maximum ratings** (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	Io	3	A
Forward current surge peak (60Hz・1cyc)	I_{FSM}	70	A
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55 to +150	℃

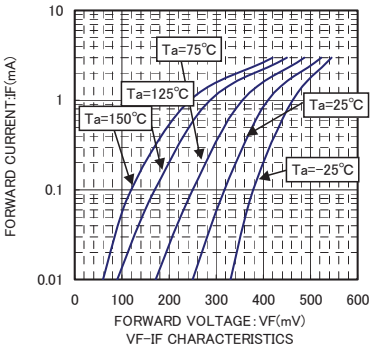
(*1)Mounted on epoxy board. 180°Half sine wave

●**Electrical characteristic** (Ta=25°C)

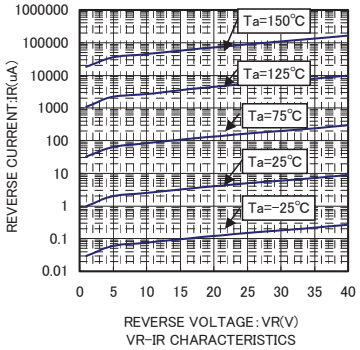
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F1	-	-	0.50	V	I_F=1.5A
	V_F2	-	-	0.55	V	I_F=3.0A
Reverse current	I_R	-	-	0.1	mA	V_R=40V

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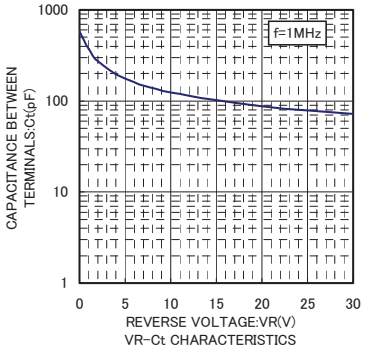
●Electrical characteristic curves



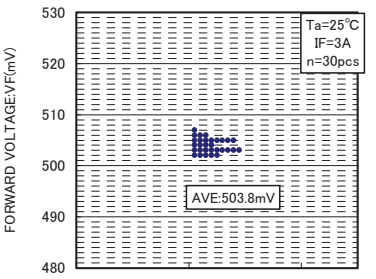
VF-IF CHARACTERISTICS



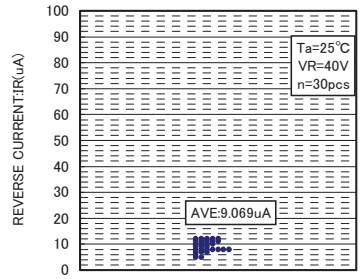
VR-IR CHARACTERISTICS



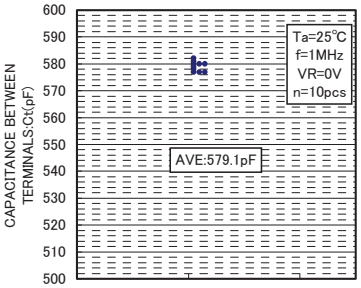
VR-Ct CHARACTERISTICS



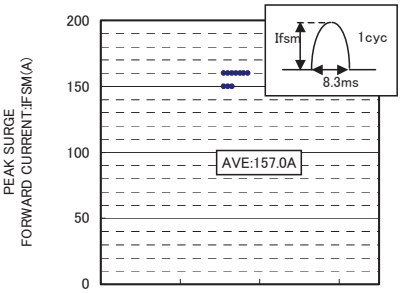
VF DISPERSION MAP



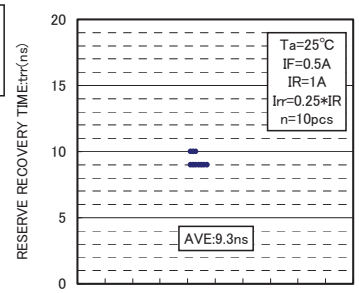
IR DISPERSION MAP



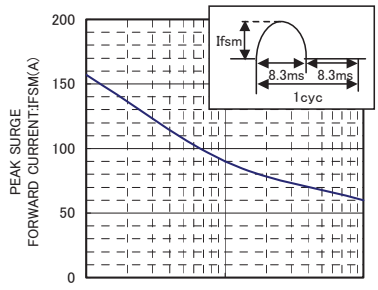
Ct DISPERSION MAP



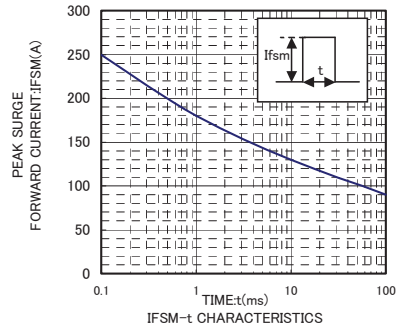
IFSM DISRESION MAP



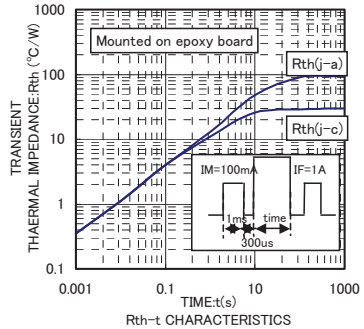
trr DISPERSION MAP



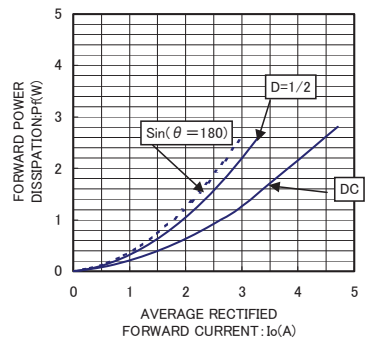
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS

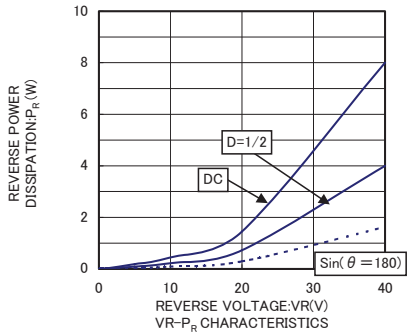


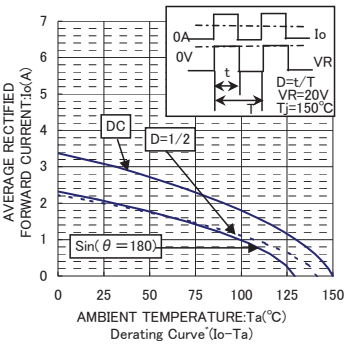
Rth-t CHARACTERISTICS

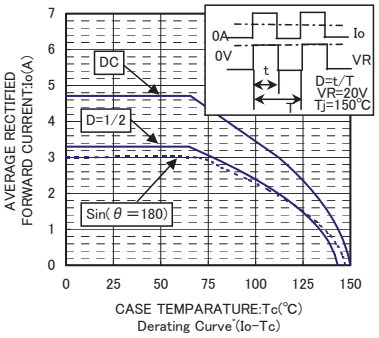


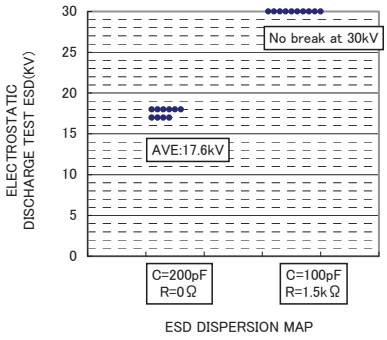
Io-Pf CHARACTERISTICS

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