Schottky barrier diode

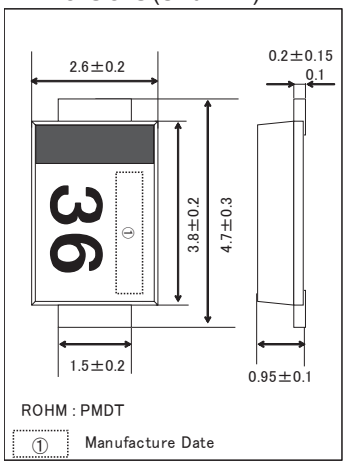
RB055LA-40

●**Applications**
General rectification

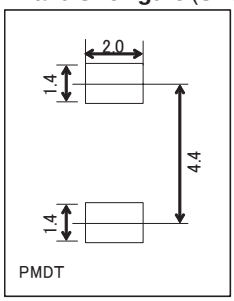
●**Features**
1) Small power mold type (PMDT)
2) Low V_F
3) High reliability

●**Structure**
Silicon epitaxial planar

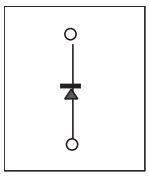
●**Dimensions** (Unit : mm)



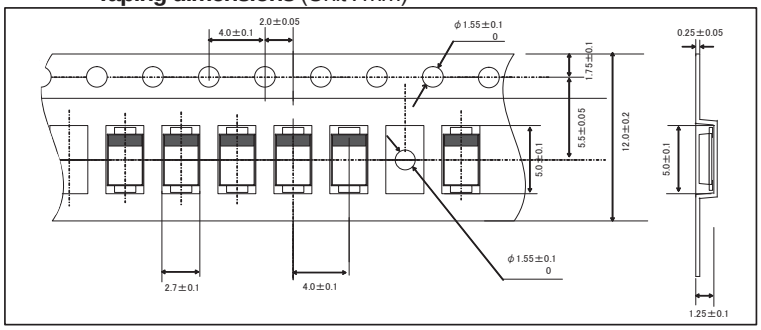
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping dimensions** (Unit : mm)



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

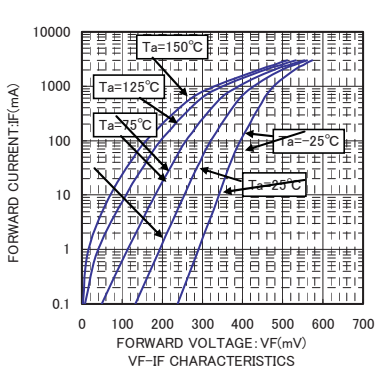
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current	Io	3	A
Forward current surge peak（60Hz・1cyc）	I_{FSM}	70	A
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55 to +150	℃

(*1)Tc=80℃max Mounted on epoxy board. 160°Half sine wave

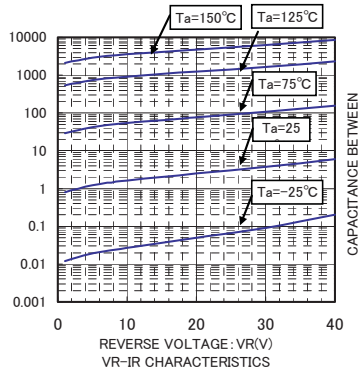
●**Electrical characteristic** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F1	-	-	0.55	V	I_F=1.5A
	V_F2	-	-	0.62	V	I_F=3.0A
Reverse current	I_R	-	-	100	μA	V_R=40V

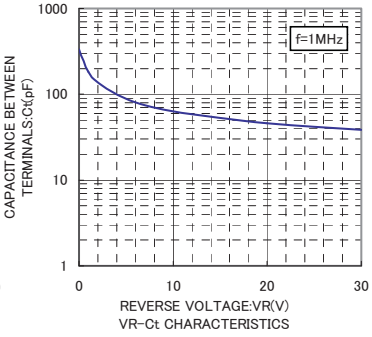
●Electrical characteristic curves



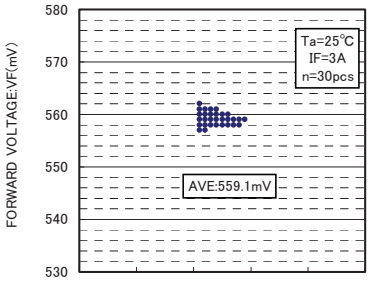
VF-IF CHARACTERISTICS



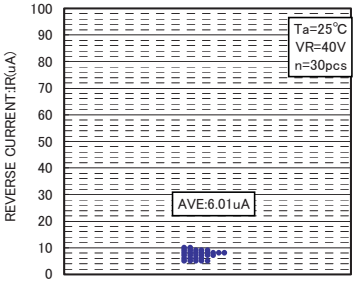
VR-IR CHARACTERISTICS



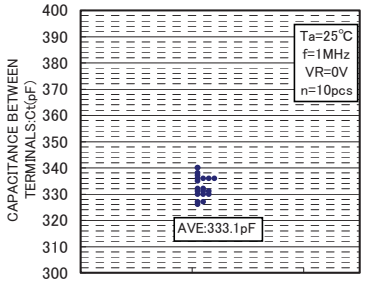
VR-Ct CHARACTERISTICS



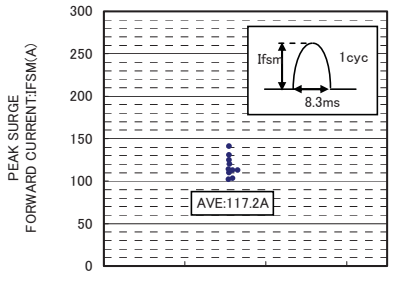
VF DISPERSION MAP



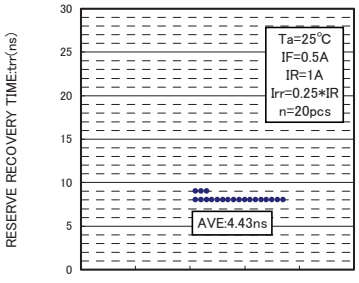
IR DISPERSION MAP



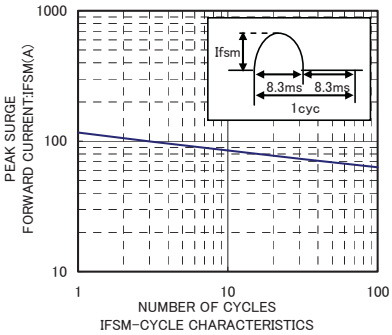
Ct DISPERSION MAP



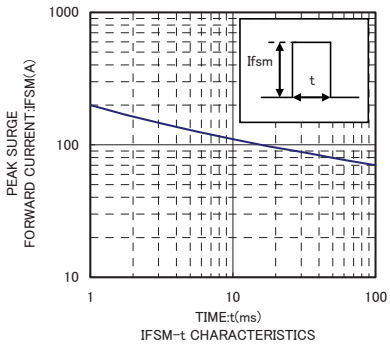
IFSM DISPERSION MAP



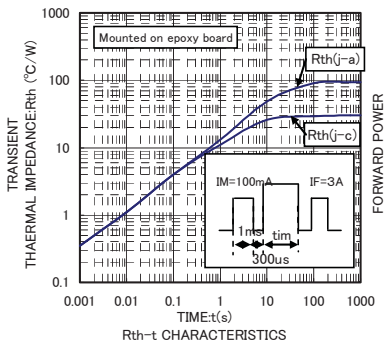
trr DISPERSION MAP



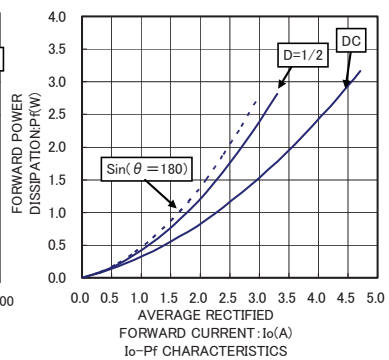
IFSM-CYCLE CHARACTERISTICS



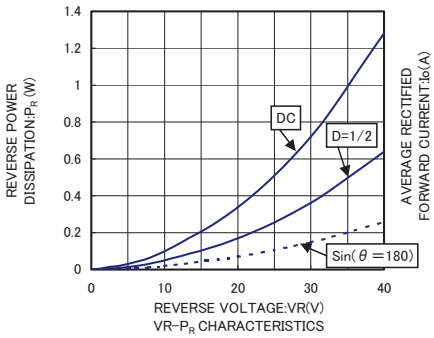
IFSM-t CHARACTERISTICS

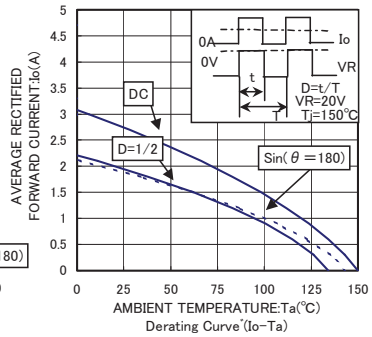


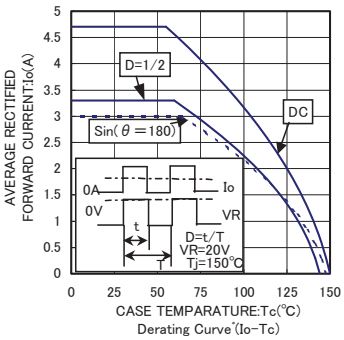
Rth-t CHARACTERISTICS

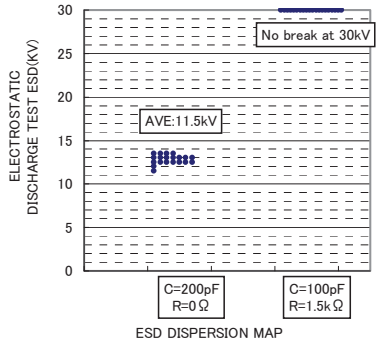


Io-Pf CHARACTERISTICS


REVERSE POWER DISSIPATION:P_R (W)
DC
D=1/2
Sin(θ=180)
REVERSE VOLTAGE:VR(V)
VR-P_R CHARACTERISTICS


AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
DC
D=1/2
Sin(θ=180)
0A
0V
Io
VR
t
D=t/T
VR=20V
Tj=150℃
AMBIT ENTEMPERATURE:Ta(℃)
Derating Curve(Io-Ta)


AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
D=1/2
Sin(θ=180)
DC
0A
0V
Io
VR
t
D=t/T
VR=20V
Tj=150℃
CASE TEMPARATURE:Tc(℃)
Derating Curve(Io-Tc)


ELECTROSTATIC DISCHARGE TEST ESD(KV)
No break at 30kV
AVE:11.5kV
C=200pF
R=0Ω
C=100pF
R=1.5kΩ
ESD DISPERSION MAP

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