Schottky barrier diode

RB480Y-90

●**Applications**

Low current rectification

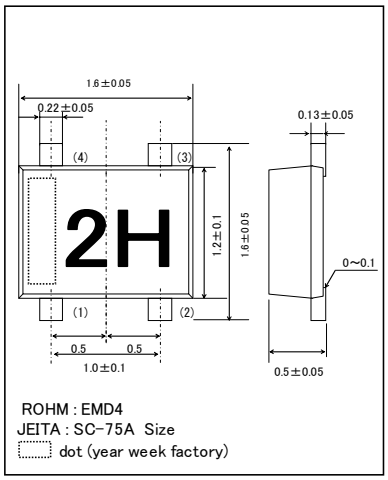
●**Features**

1) Ultra small mold type. (EMD4)
2) Low V_F
3) High reliability

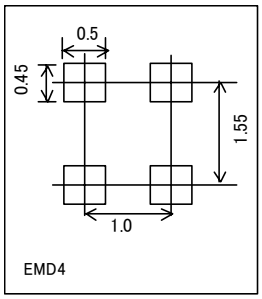
●**Construction**

Silicon epitaxial planar

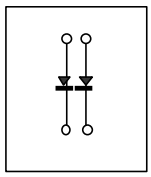
●**Dimensions** (Unit : mm)



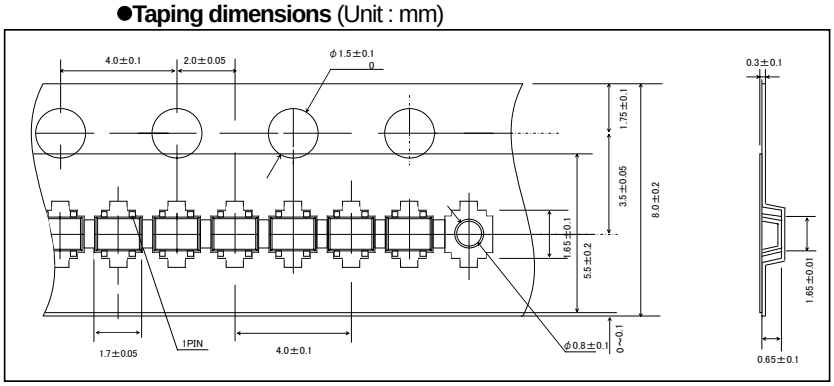
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping dimensions** (Unit : mm)



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

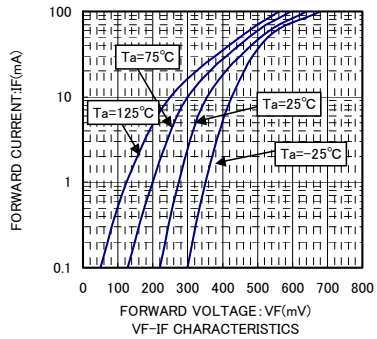
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	90	V
Reverse voltage (DC)	V_R	90	V
Average rectified forward current (*1)	Io	100	mA
Forward current surge peak (60Hz・1cyc) (*1)	I_{FSM}	1	A
Junction temperature	Tj	125	℃
Storage temperature	Tstg	-40 to +125	℃

(*1) Rating of per diode

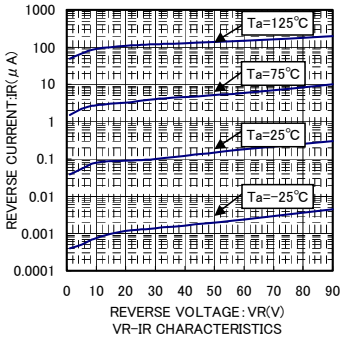
●**Electrical characteristic** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.64	0.69	V	I_F=100mA
Reverse current	I_R	-	0.3	5	μA	V_R=90V

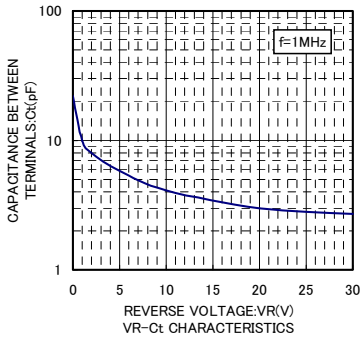
●Electrical characteristic curves



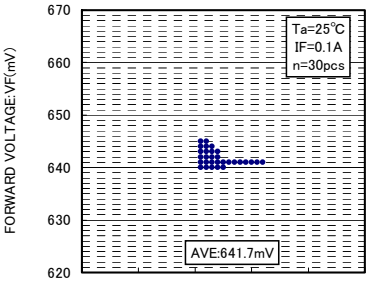
VF-IF CHARACTERISTICS



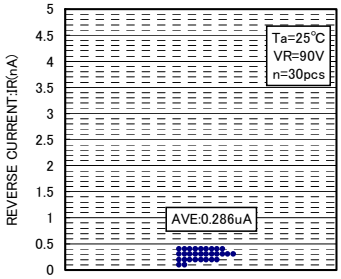
VR-IR CHARACTERISTICS



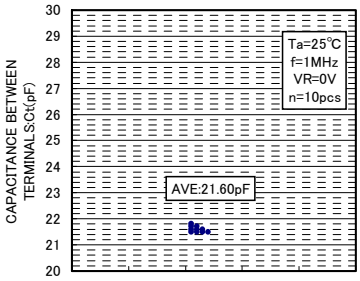
VR-Ct CHARACTERISTICS



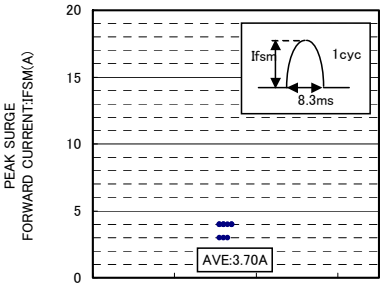
VF DISPERSION MAP



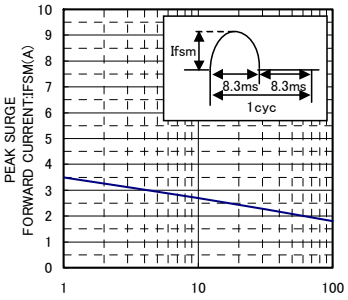
IR DISPERSION MAP



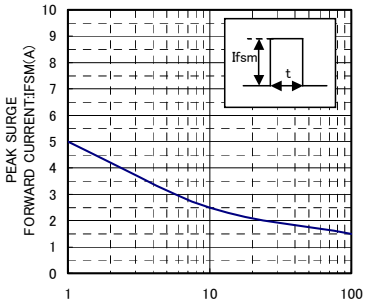
Ct DISPERSION MAP



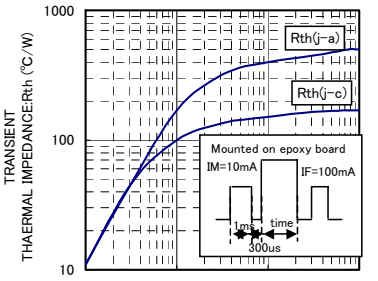
IFSM DISRESION MAP



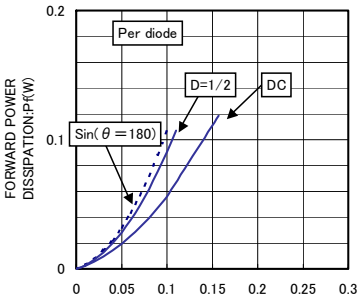
IFSM-CYCLE CHARACTERISTICS



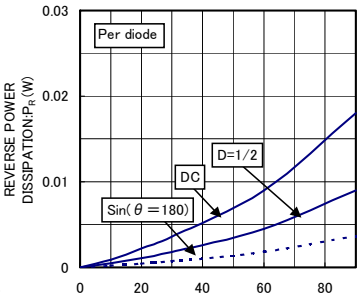
IFSM-t CHARACTERISTICS



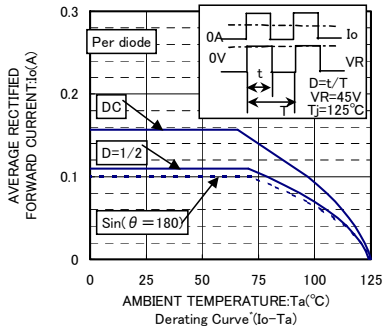
Rth-t CHARACTERISTICS

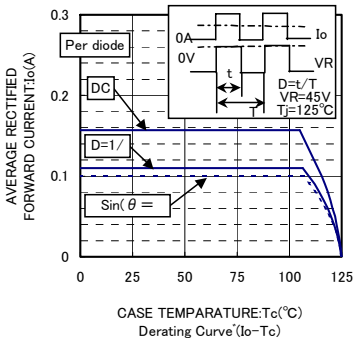


Io-Pf CHARACTERISTICS



VR-P_R CHARACTERISTICS


0.3
0.2
0.1
0
Per diode
DC
D=1/2
Sin(θ=180)
0A
0V
Io
VR
t
T
D=t/T
VR=45V
Tj=125℃
0
25
50
75
100
125
AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
AMBIENT TEMPERATURE:Ta(℃)
Derating Curve(Io-Ta)


0.3
0.2
0.1
0
Per diode
DC
D=1/
Sin(θ=
0A
0V
Io
VR
t
T
D=t/T
VR=45V
Tj=125℃
0
25
50
75
100
125
AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
CASE TEMPARATURE:Tc(℃)
Derating Curve(Io-Tc)

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