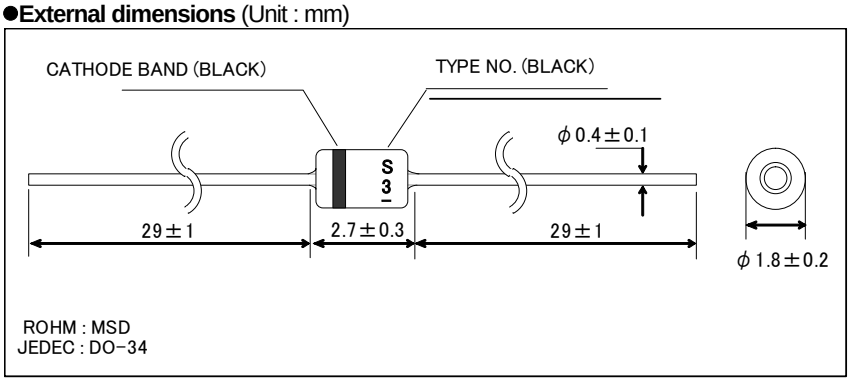
Schottky barrier diode

RB441Q-40

●**Applications**
Low current rectification

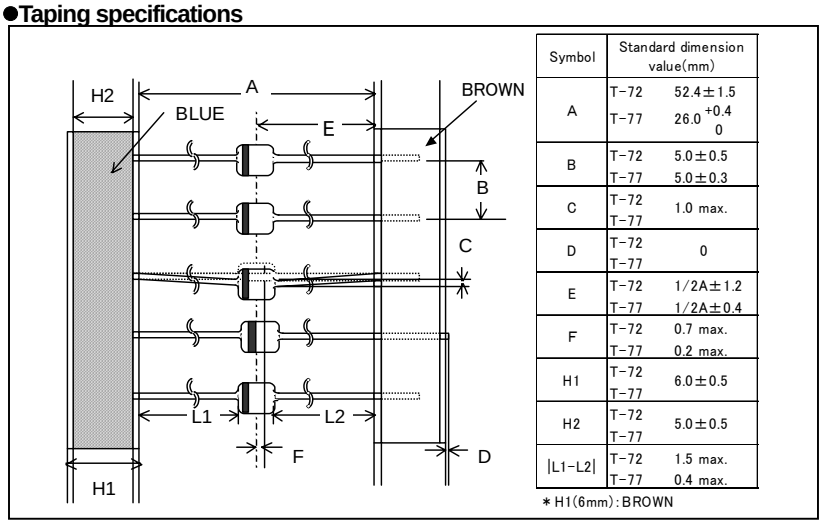
●**Features**
1) Glass sealed envelope. (MSD)
2) Low V_F, Low I_R
3) High reliability

●**External dimensions** (Unit : mm)



●**Construction**
Silicon epitaxial planar

●**Taping specifications**



Symbol	Standard dimension value(mm)	
A	T-72	52.4±1.5
	T-77	26.0 +0.4 0
B	T-72	5.0±0.5
	T-77	5.0±0.3
C	T-72	1.0 max.
	T-77	
D	T-72	0
	T-77	
E	T-72	1/2A±1.2
	T-77	1/2A±0.4
F	T-72	0.7 max.
	T-77	0.2 max.
H1	T-72	6.0±0.5
	T-77	
H2	T-72	5.0±0.5
	T-77	
|L1-L2|	T-72	1.5 max.
	T-77	0.4 max.

∗H1(6mm) : BROWN

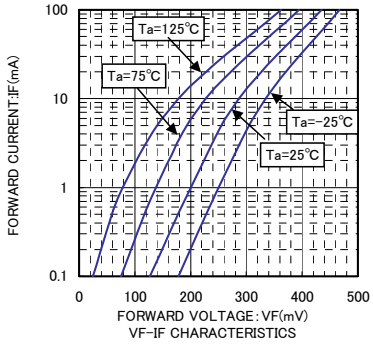
●**Absolute maximum ratings** (Ta = 25°C)

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

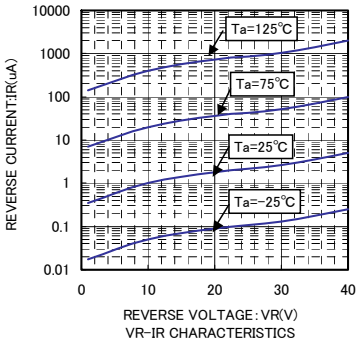
●**Electrical characteristics** (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward current	V_F1	-	-	0.34	V	I_F=10mA
	V_F2	-	-	0.55	V	I_F=100mA
Reverse current	I_R	-	-	100	μA	V_R=40V
Capacitance between terminals	Ct	-	6.0	-	pF	V_R=10V , f=1MHz

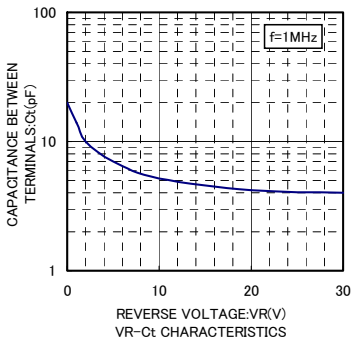
●**Electrical characteristic curves**



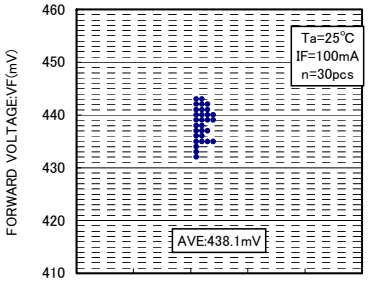
VF-IF CHARACTERISTICS



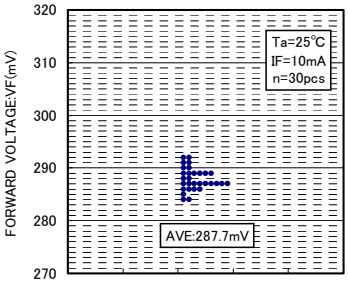
VR-IR CHARACTERISTICS



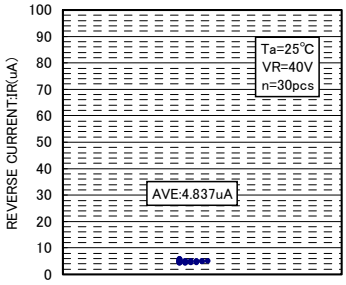
VR-Ct CHARACTERISTICS



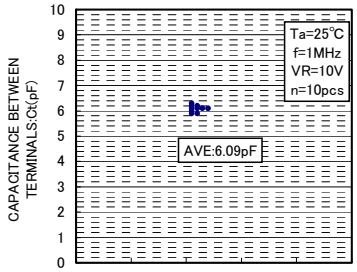
VF DISPERSION MAP



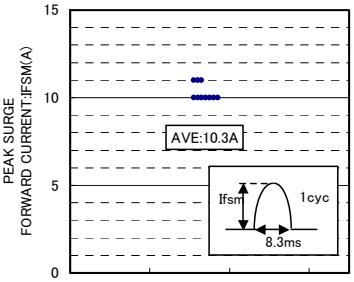
VF DISPERSION MAP



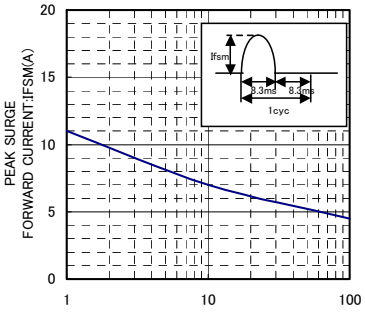
IR DISPERSION MAP



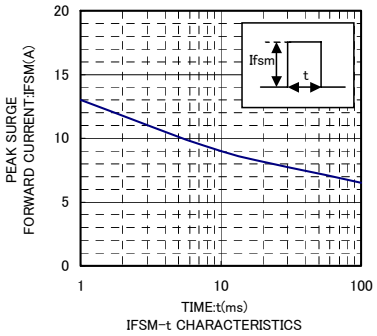
Ct DISPERSION MAP



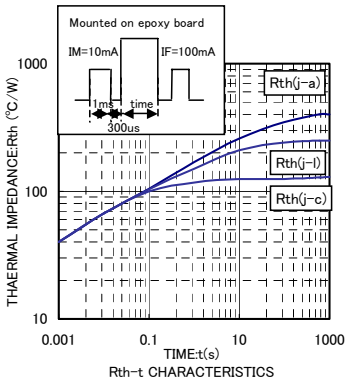
IFSM DISRESION MAP



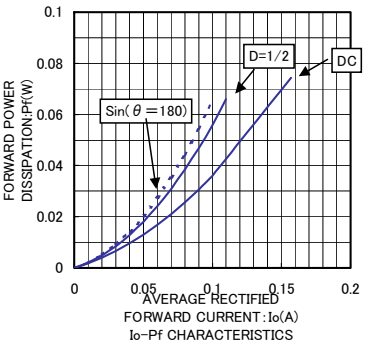
IFSM-CYCLE CHARACTERISTICS



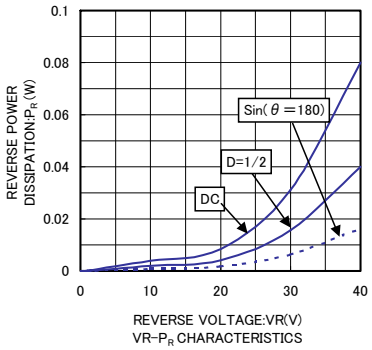
IFSM-t CHARACTERISTICS

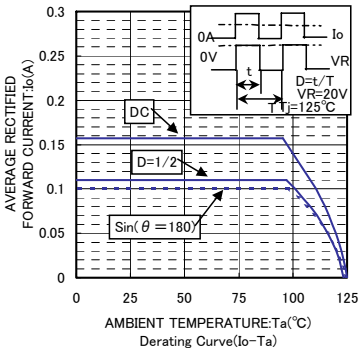


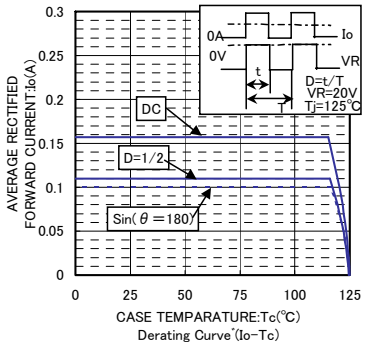
Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS


REVERSE POWER DISSIPATION:P_R(W)
0.1
0.08
0.06
0.04
0.02
0
0
10
20
30
40
Sin(θ=180)
D=1/2
DC
REVERSE VOLTAGE:VR(V)
VR-P_R CHARACTERISTICS


AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
0.3
0.25
0.2
0.15
0.1
0.05
0
0
25
50
75
100
125
0A
0V
Io
VR
t
T
D=t/T
VR=20V
Tj=125℃
DC
D=1/2
Sin(θ=180)
AMBIENT TEMPERATURE:Ta(℃)
Derating Curve(Io-Ta)


AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
0.3
0.25
0.2
0.15
0.1
0.05
0
0
25
50
75
100
125
0A
0V
Io
VR
t
T
D=t/T
VR=20V
Tj=125℃
DC
D=1/2
Sin(θ=180)
CASE TEMPARATURE:Tc(℃)
Derating Curve(Io-Tc)

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