Schottky barrier diode

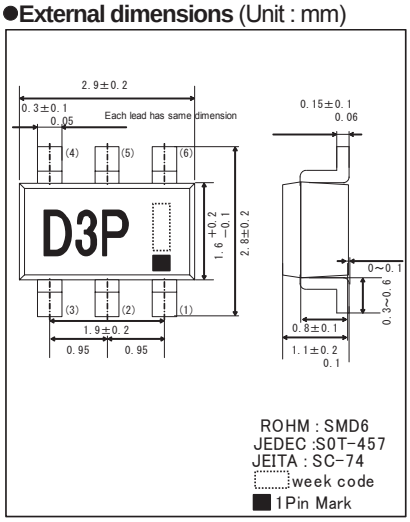
RB731U

●**Applications**
Low current rectification

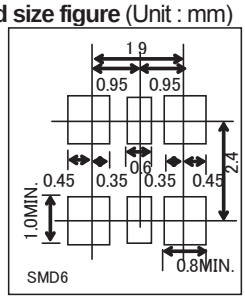
●**Features**
1) Small mold type. (SMD6)
2) Low I_R
3) High reliability

●**Construction**
Silicon epitaxial planar

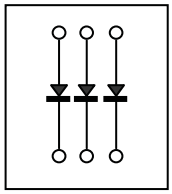
●**External dimensions** (Unit : mm)



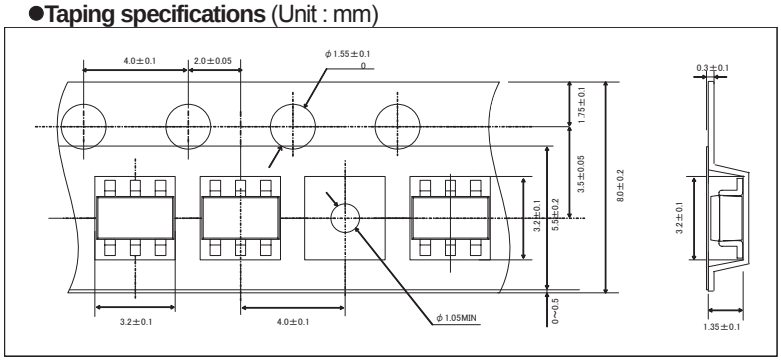
●**Land size figure** (Unit : mm)



●**Structure**



●**Taping specifications** (Unit : mm)



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

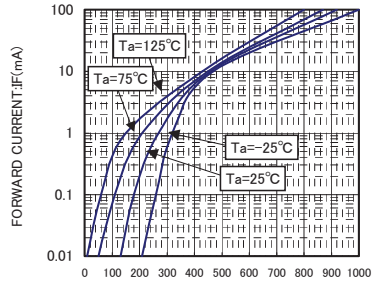
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current (*1)	Io	30	mA
Forward current surge peak (60Hz・1cyc)	I_{FSM}	200	mA
Junction temperature	Tj	125	℃
Storage temperature	Tstg	-40 to +125	℃

(*1)Per chip : Io/3

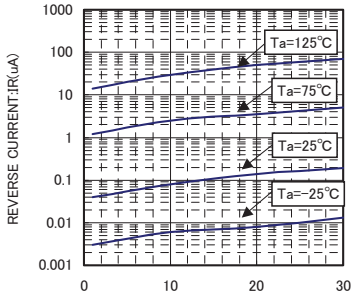
●**Electrical characteristics** (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.37	V	I_F=1mA
Reverseu current	I_R	-	-	1	μA	V_R=10V
Capacitance between terminals	Ct	-	2.0	-	pF	V_R=1V , f=1MHz

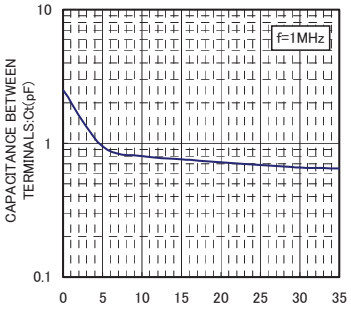
●Electrical characteristic curves (Ta=25°C)



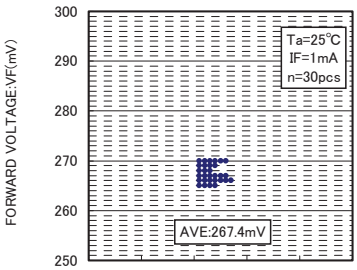
FORWARD VOLTAGE:VF(mV)
VF-IF CHARACTERISTICS



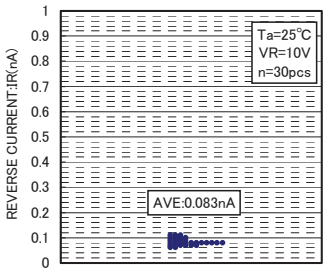
REVERSE VOLTAGE:VR(V)
VR-IR CHARACTERISTICS



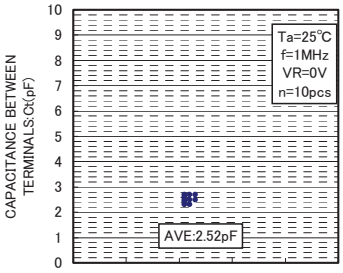
REVERSE VOLTAGE:VR(V)
VR-Ct CHARACTERISTICS



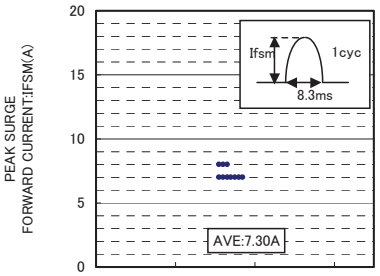
VF DIPERSION MAP



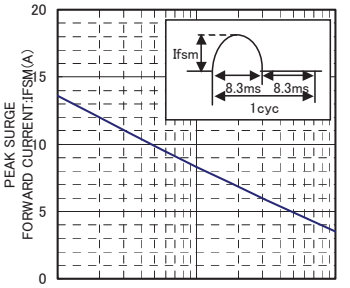
IR DISPERSION MAP



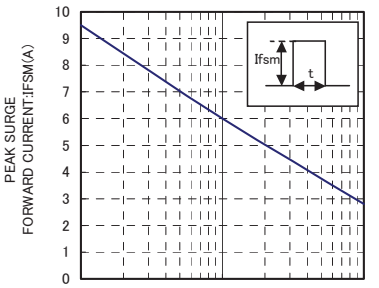
Ct DISPERSION MAP



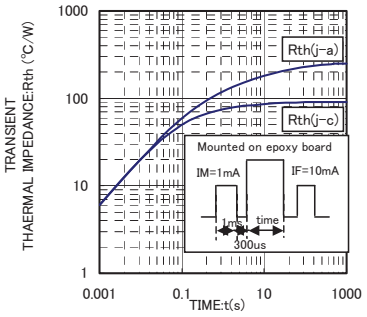
IFSM DISPERSION MAP



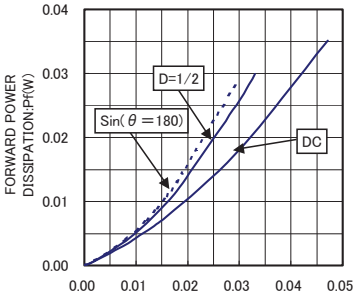
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



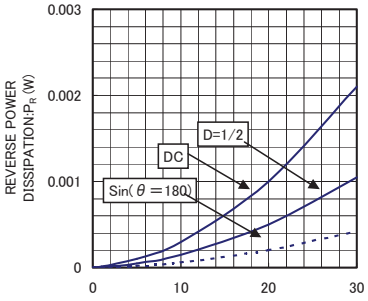
TIME:t(ms)
IFSM-t CHARACTERISTICS



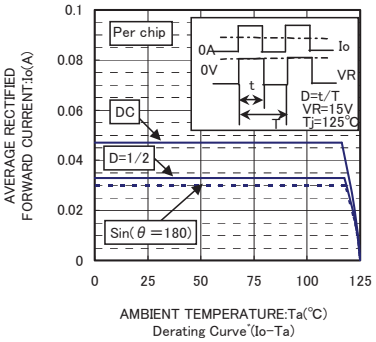
Rth-t CHARACTERISTICS

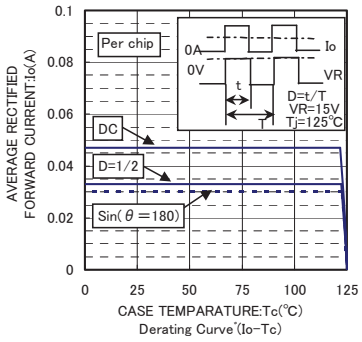


AVERAGE RECTIFIED
FORWARD CURRENT Io(A)
Io-Pf CHARACTERISTICS



REVERSE VOLTAGE:VR(V)
VR-P_R CHARACTERISTICS


0.1
0.08
0.06
0.04
0.02
0
Per chip
DC
D=1/2
Sin(θ=180)
0A
0V
Io
VR
t
T
D=t/T
VR=15V
Tj=125°C
0
25
50
75
100
125
AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
AMBIENT TEMPERATURE:Ta(°C)
Derating Curve (Io-Ta)


0.1
0.08
0.06
0.04
0.02
0
Per chip
DC
D=1/2
Sin(θ=180)
0A
0V
Io
VR
t
T
D=t/T
VR=15V
Tj=125°C
0
25
50
75
100
125
AVERAGE RECTIFIED FORWARD CURRENT:Io(A)
CASE TEMPARATURE:Tc(°C)
Derating Curve (Io-Tc)

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