

Schottky barrier diode

RB085B-40

● **Applications**

General rectification

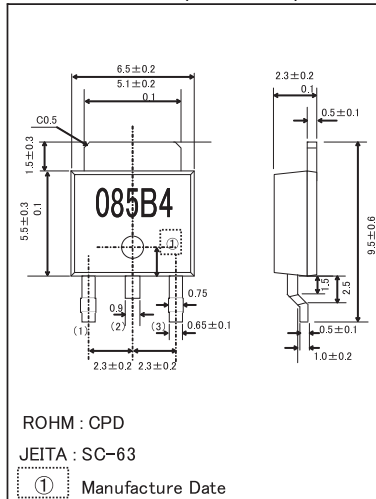
● **Features**

- 1) Power mold type. (CPD)
- 2) Low V_F
- 3) High reliability

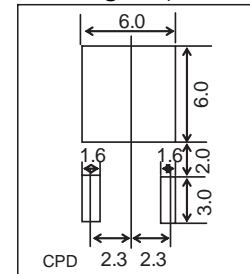
● **Construction**

Silicon epitaxial planar

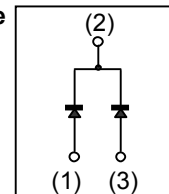
● **Dimensions (Unit : mm)**



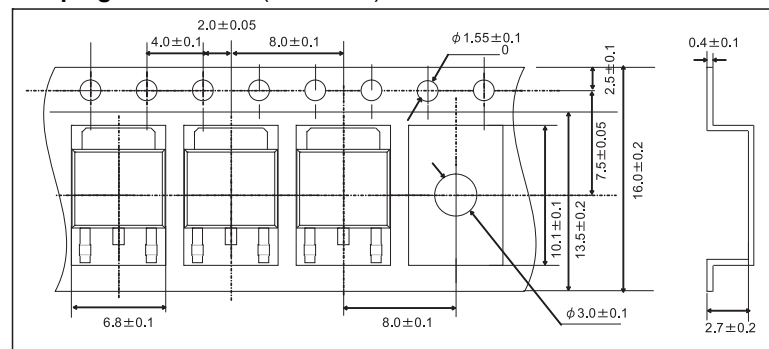
● **Land size figure (Unit : mm)**



● **Structure**



● **Taping dimensions (Unit : mm)**



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

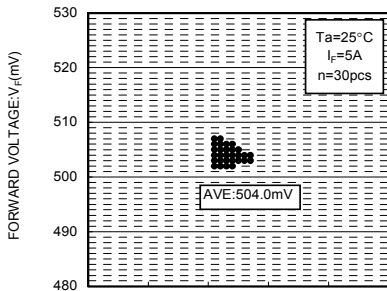
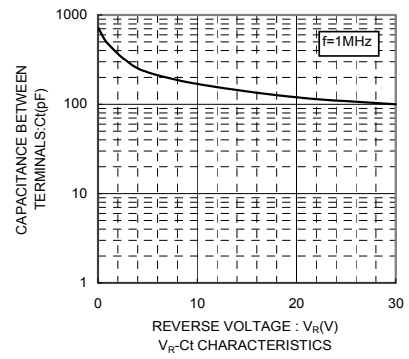
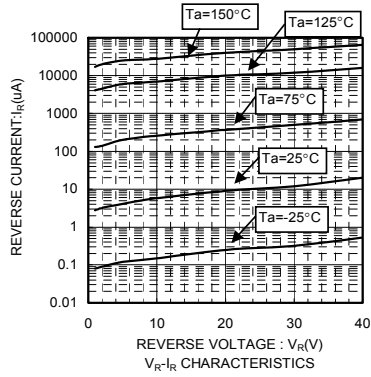
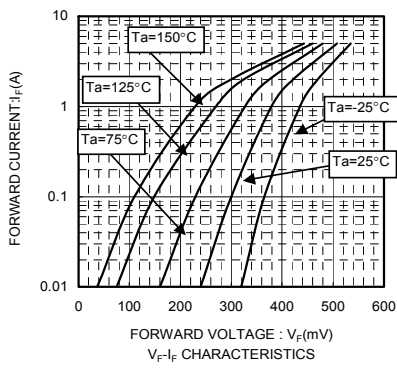
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	45	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward current(*1)	I_o	10	A
Forward current surge peak(60Hz / 1cyc)(*1)	I_{FSM}	45	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40 to +150	°C

(*1) Rating of per diode : $I_o/2$

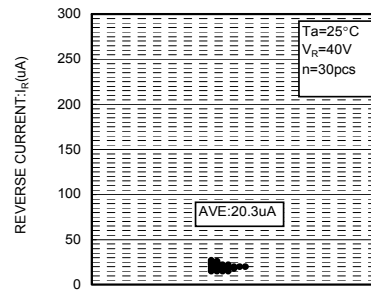
● **Electrical characteristic (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.55	V	$I_F=5.0A$
Reverse current	I_R	-	-	200	μA	$V_R=40V$
Thermal impedance	θ_{jc}	-	-	6.0	°C/W	junction to case

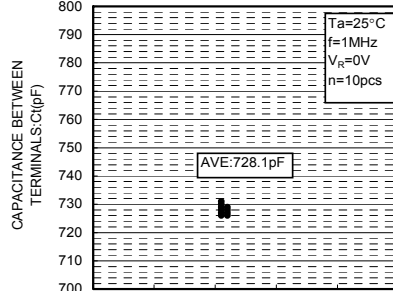
● Electrical characteristic curves



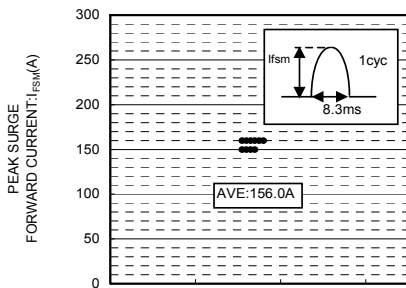
V_F DISPERSION MAP



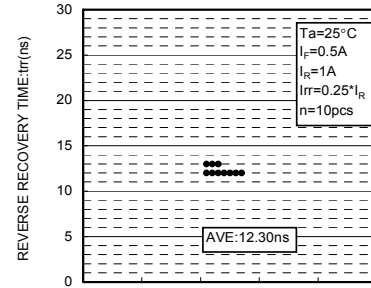
I_R DISPERSION MAP



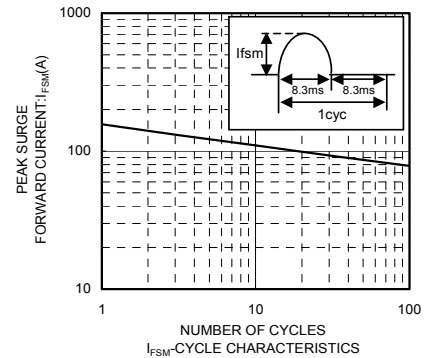
C_t DISPERSION MAP



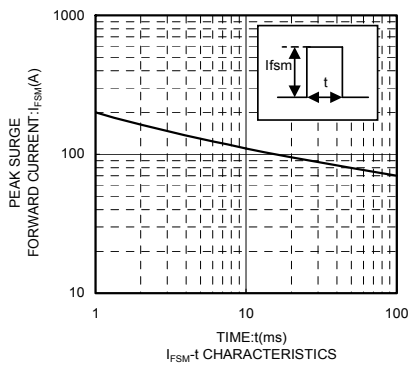
I_{FSM} DISPERSION MAP



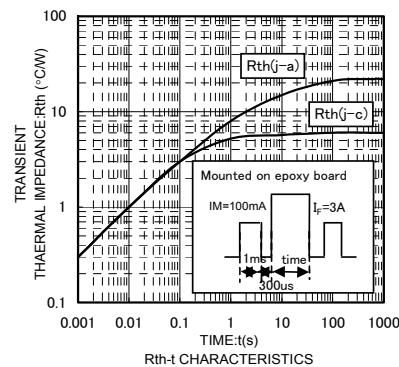
t_{rr} DISPERSION MAP



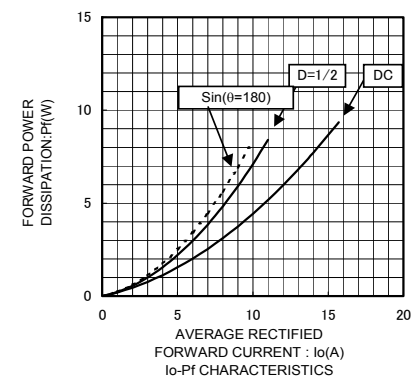
I_{FSM} -CYCLE CHARACTERISTICS



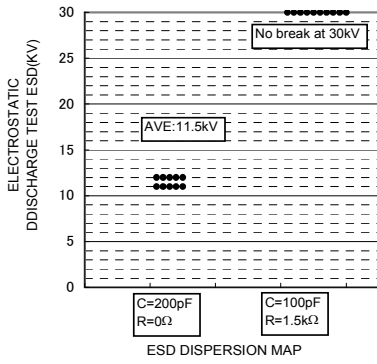
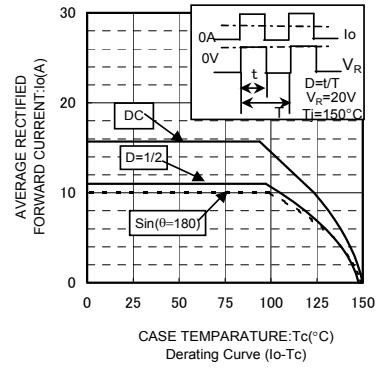
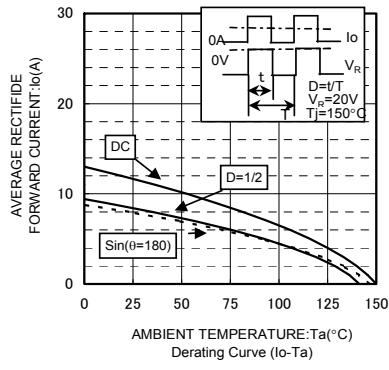
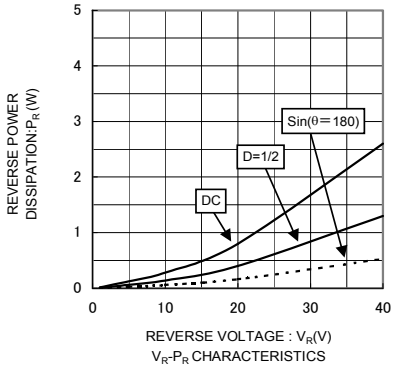
I_{FSM} - t CHARACTERISTICS



R_{th} - t CHARACTERISTICS



I_o - P CHARACTERISTICS



Notes

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