

DB24417

Silicon epitaxial planar type

For rectification

■ Features

- Low forward voltage V_F
- Forward current (Average) $I_{F(AV)} = 5$ A rectification is possible
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 4W

■ Packaging

DB2441700L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Repetitive peak reverse voltage	V_{RRM}	40	V
Forward current (Average) *1	$I_{F(AV)}$	5.0	A
Non-repetitive peak forward surge current *2	I_{FSM}	50	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

Note) *1: Mounted on an alumina PC board (Board: 50 mm × 50 mm)

*2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

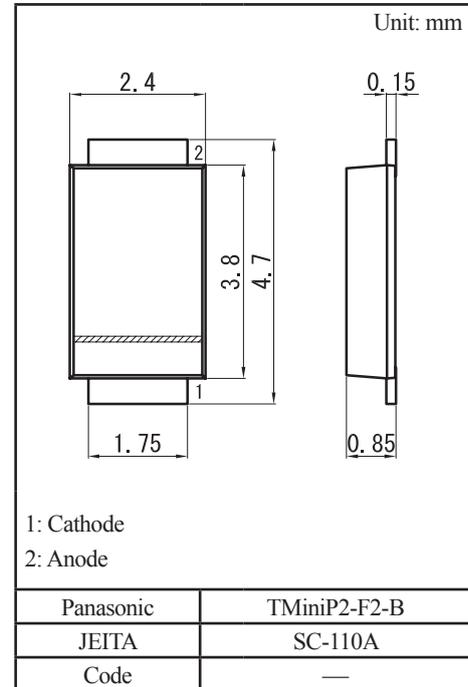
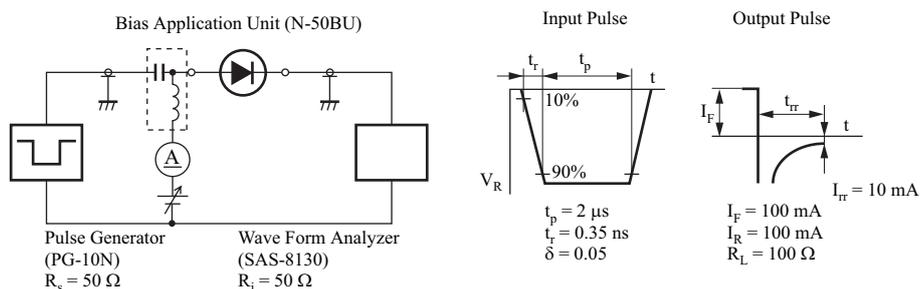
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

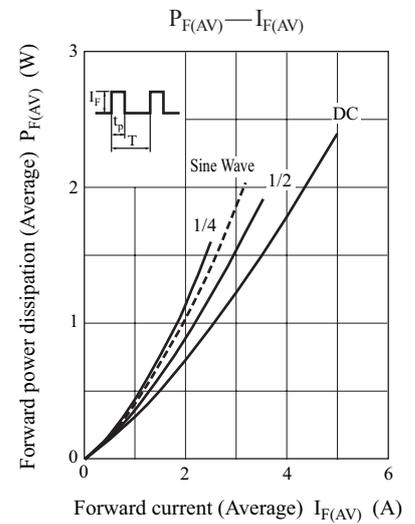
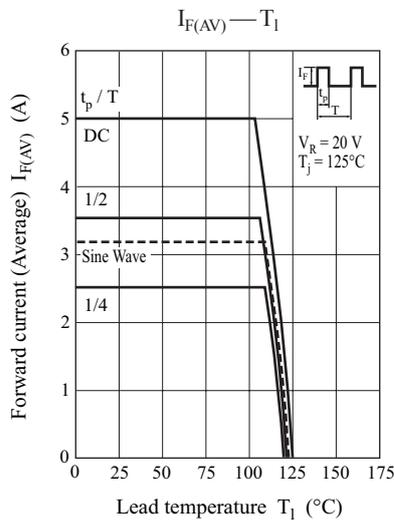
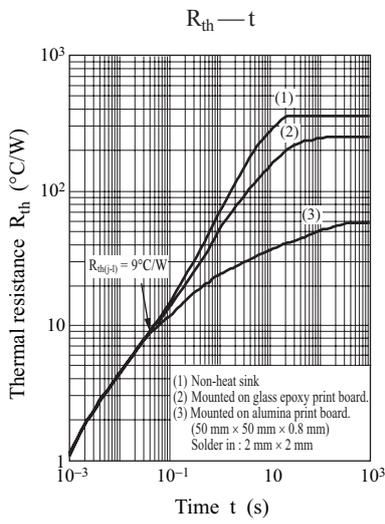
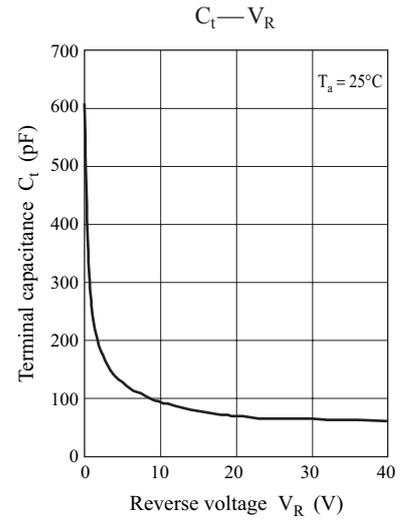
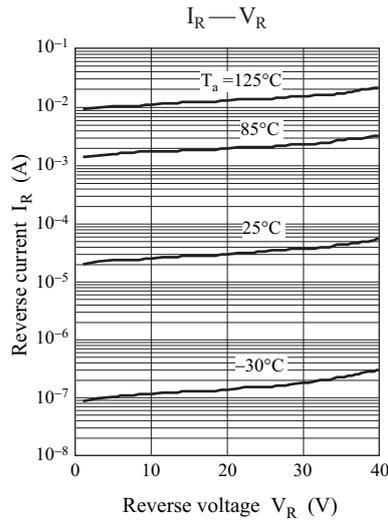
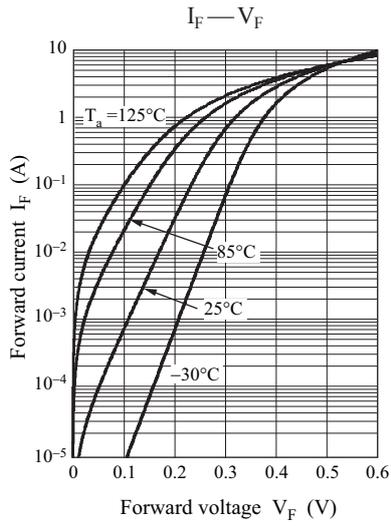
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 5.0$ A		0.47	0.54	V
Reverse current	I_R	$V_R = 40$ V		60	300	μA
Terminal capacitance	C_t	$V_R = 10$ V, $f = 1$ MHz		95		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA, $I_{rr} = 10$ mA, $R_L = 100 \Omega$		30		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

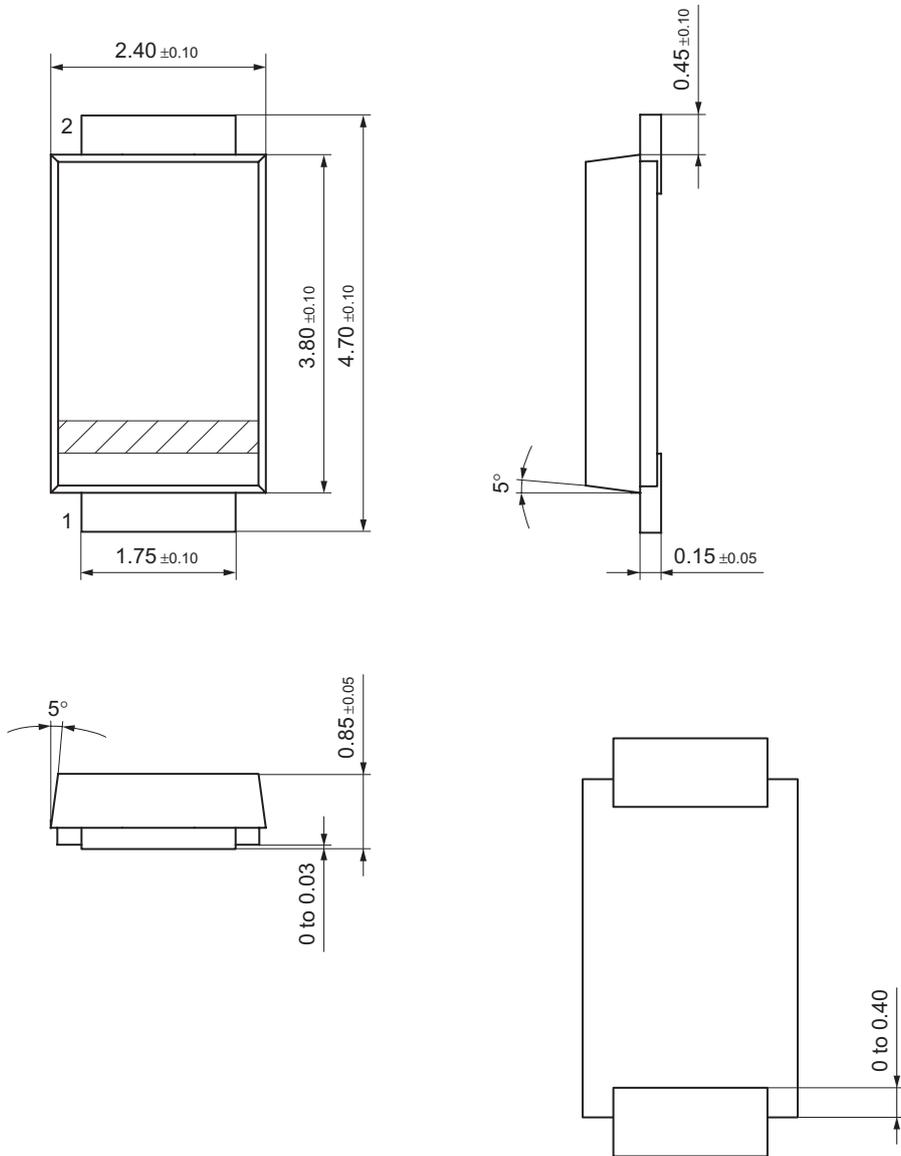
3. *: t_{rr} measurement circuit



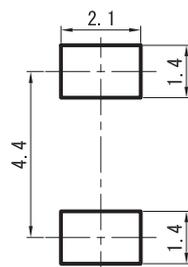


TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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