

# DB24305

## Silicon epitaxial planar type

For rectification

### ■ Features

- Low forward voltage  $V_F$
- Forward current (Average)  $I_{F(AV)} = 3\text{ A}$  rectification is possible
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

### ■ Marking Symbol: 33

### ■ Packaging

DB2430500L 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	$V_R$	30	V
Maximum peak reverse voltage	$V_{RM}$	30	V
Forward current *1	$I_F$	3.0	A
Non-repetitive peak forward surge current *2	$I_{FSM}$	30	A
Junction temperature *1	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \*1:  $T_1 = 80^\circ\text{C}$

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

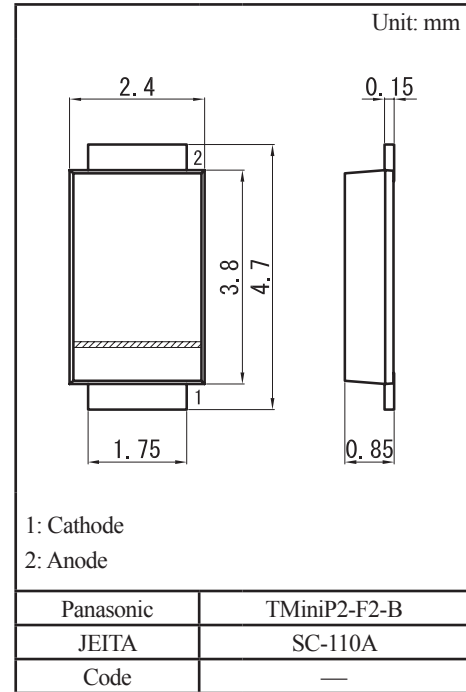
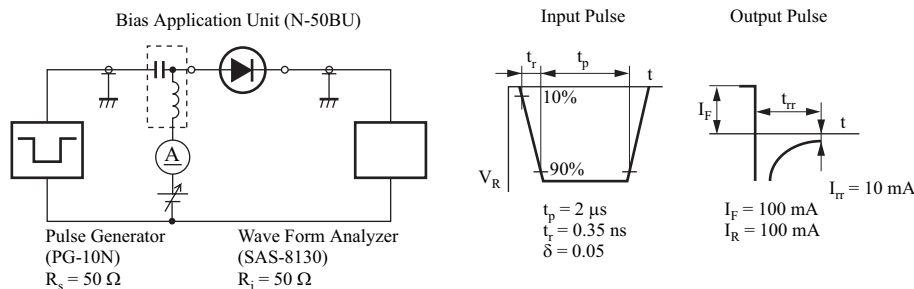
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

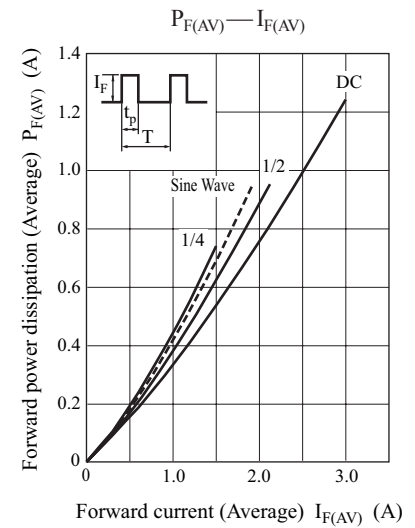
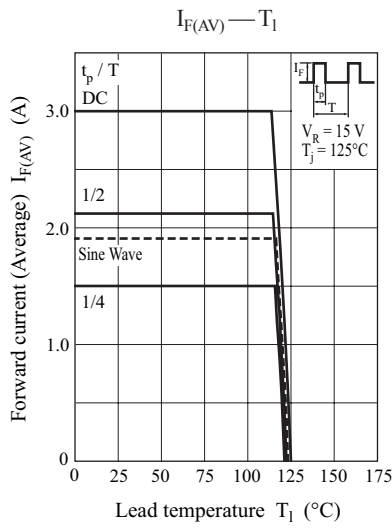
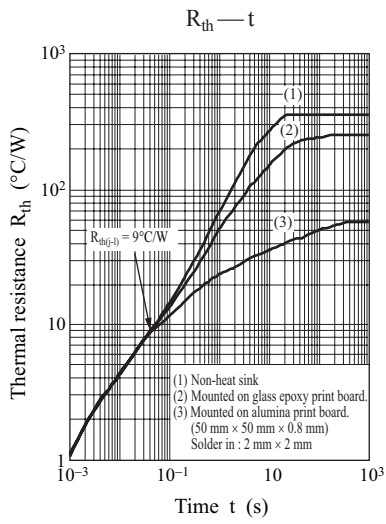
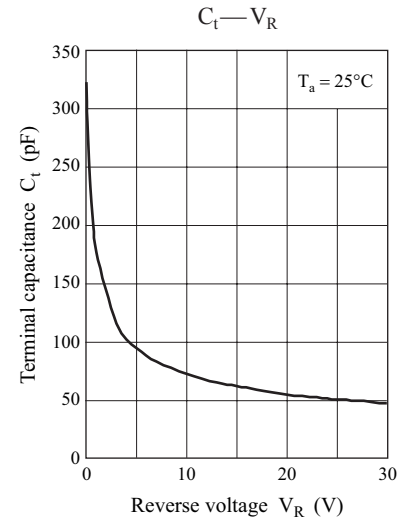
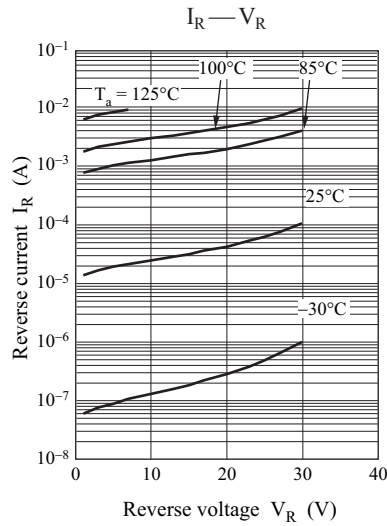
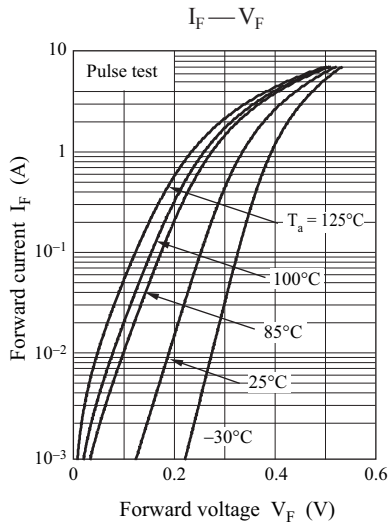
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 3.0\text{ A}$			0.45	V
Reverse current	$I_R$	$V_R = 30\text{ V}$			300	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 10\text{ V}, f = 1\text{ MHz}$		74		pF
Reverse recovery time *1	$t_{rr}$	$I_F = I_R = 100\text{ mA}, I_{tr} = 10\text{ mA}$		23		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.

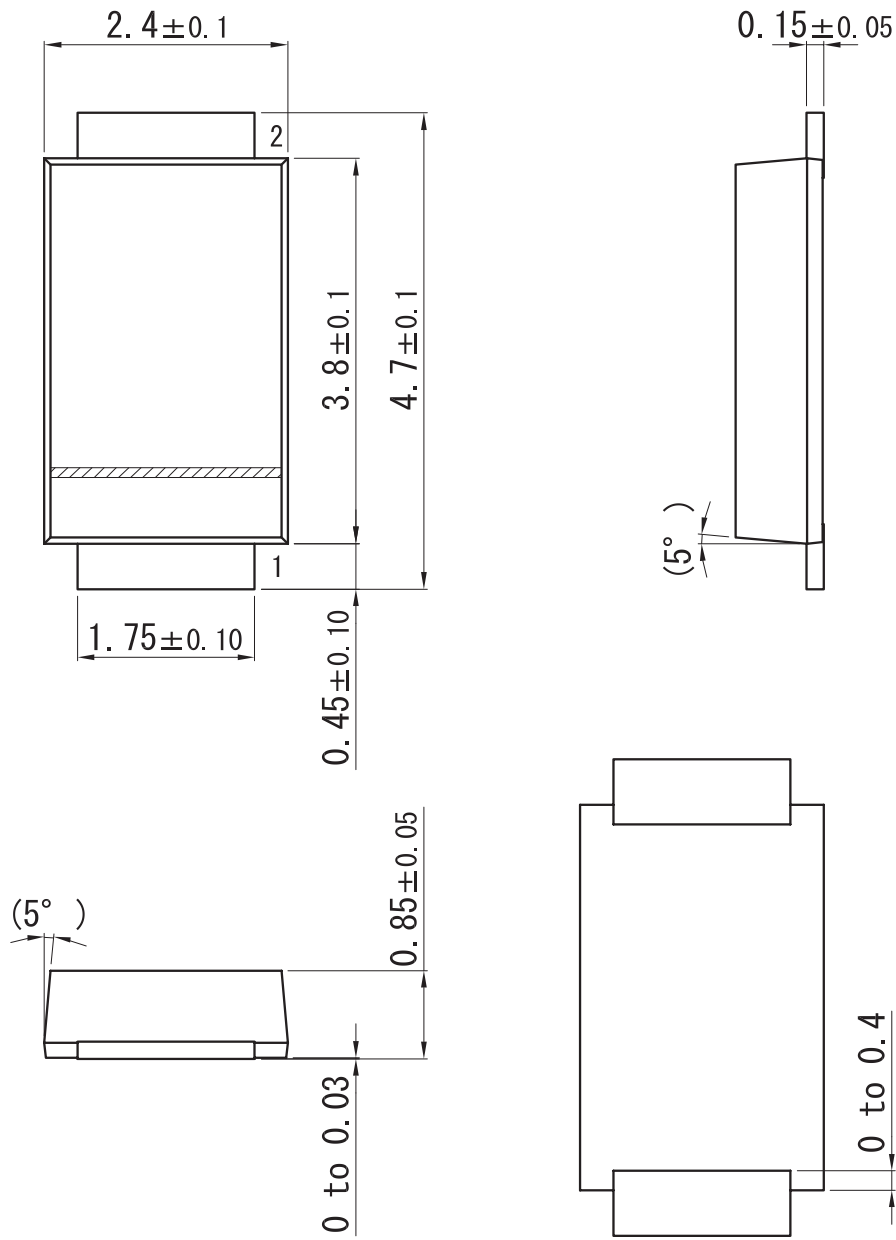
3. \*1:  $t_{rr}$  measurement circuit



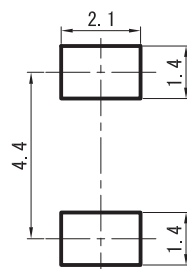


TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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