

# DB2X414

## Silicon epitaxial planar type

For high frequency rectification

### ■ Features

- High forward current (average) rating :  $I_{F(AV)} = 2A$
- Low forward voltage  $V_F$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

### ■ Marking Symbol: 4P

### ■ Packaging

DB2X41400L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	40	V
Maximum peak reverse voltage	$V_{RM}$	40	V
Forward current (Average) *1	$I_{F(AV)}$	2	A
Non-repetitive peak forward surge current *2	$I_{FSM}$	15	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note) \*1: Mounted on an alumina PC board

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

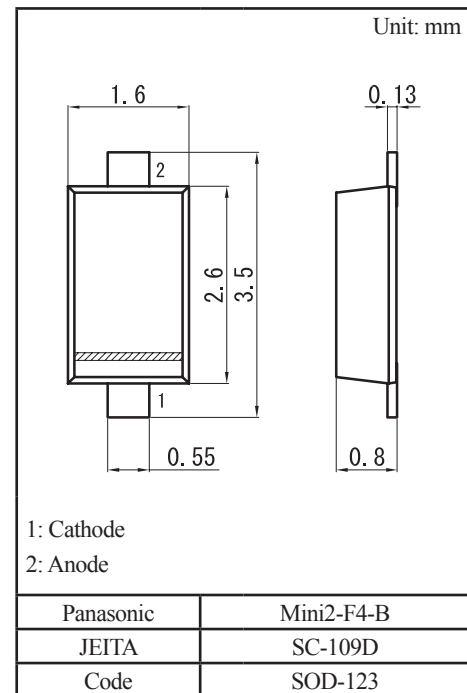
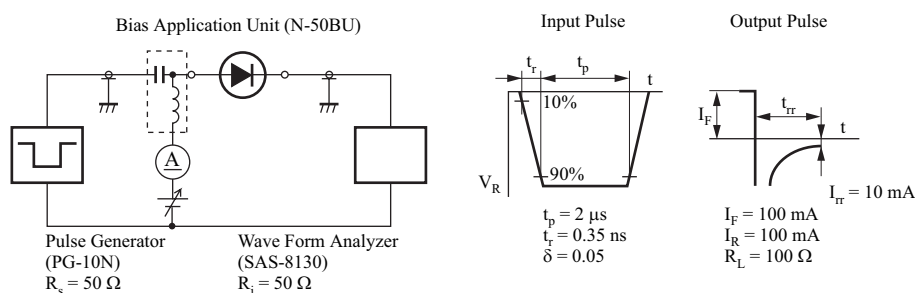
### ■ Electrical Characteristics $T_a = 25^\circ C \pm 3^\circ C$

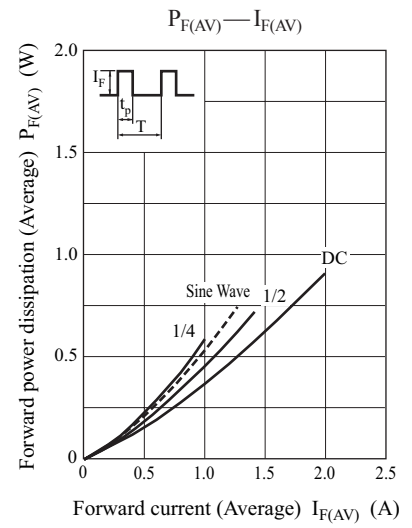
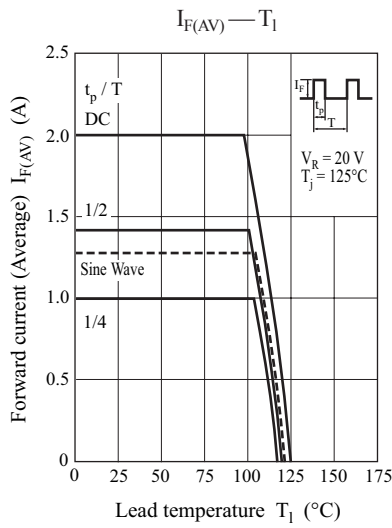
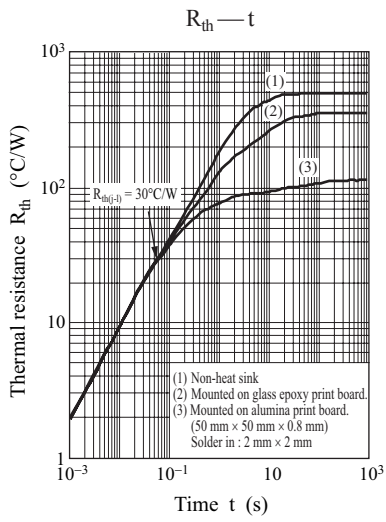
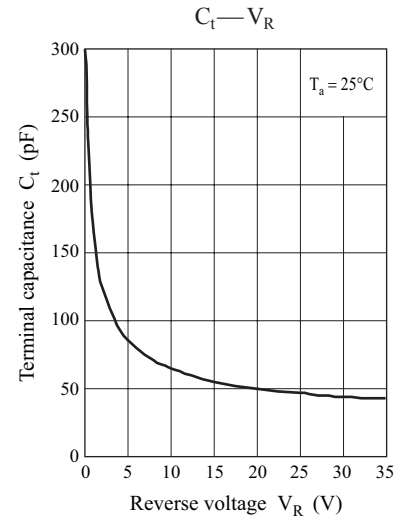
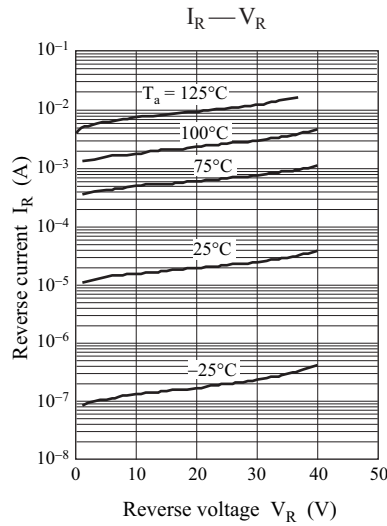
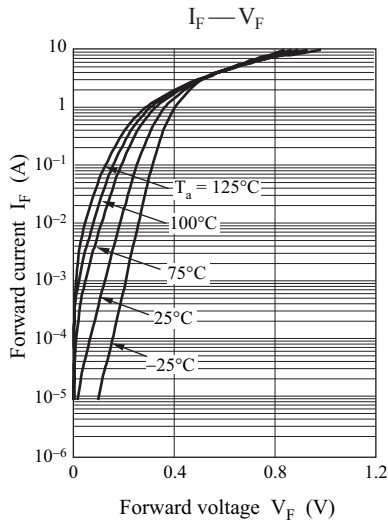
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 2 A$		0.42	0.49	V
Reverse current	$I_R$	$V_R = 40 V$			200	$\mu A$
Terminal capacitance	$C_t$	$V_R = 10 V, f = 1 MHz$		70		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100 mA, I_{rr} = 10 mA, R_L = 100 \Omega$		30		ns

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.

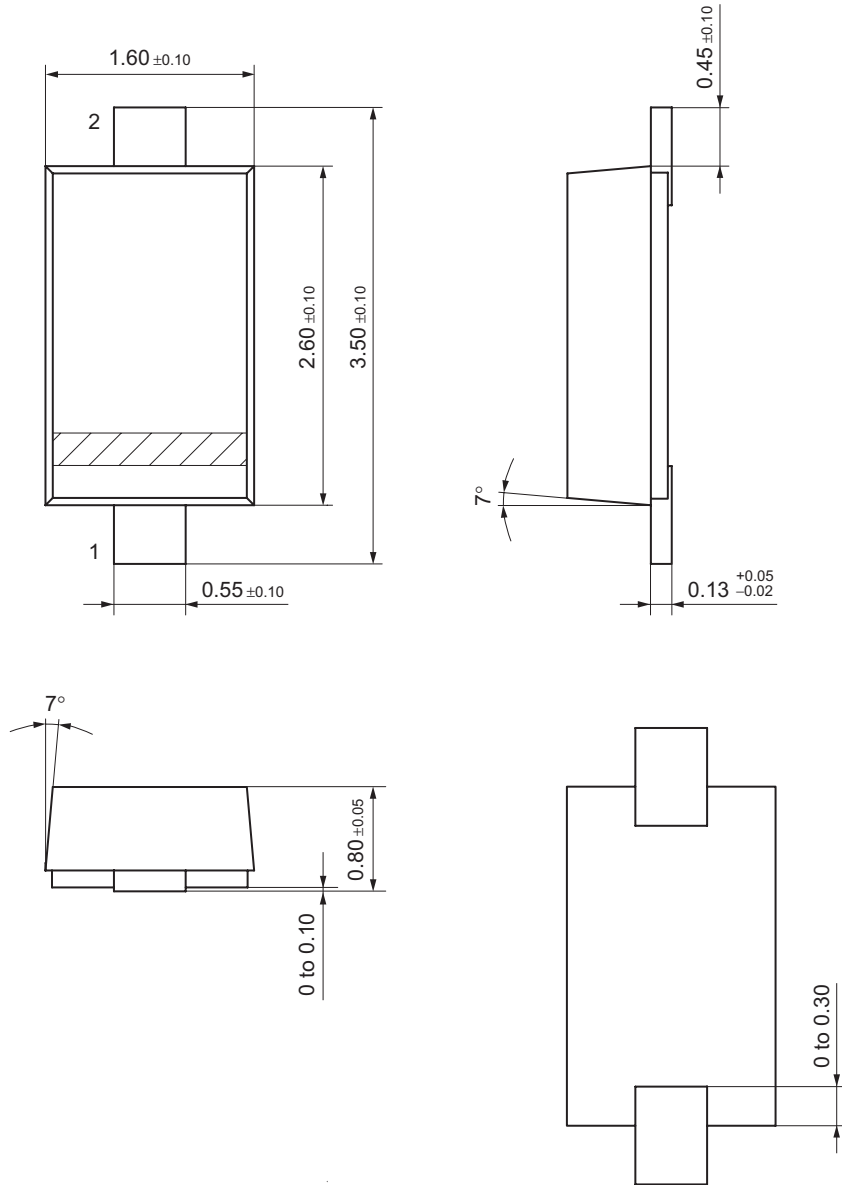
3. \*:  $t_{rr}$  measurement circuit



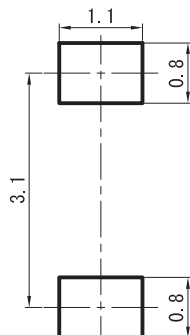


Mini2-F4-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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