

# MA22D39

## Silicon epitaxial planar type

For high speed switching circuits

### ■ Features

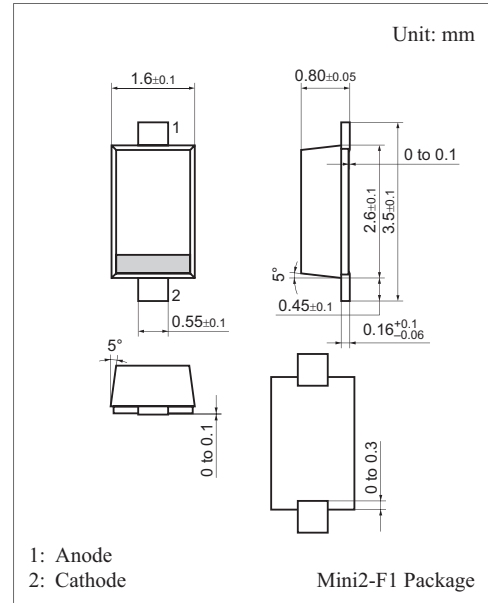
- Optimum for forward current (Effective value)  $I_{F(RMS)} = 1.57$  A rectification
- Reverse voltage  $V_R = 40$  V is guaranteed

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	40	V
Maximum peak reverse voltage	$V_{RM}$	40	V
Forward current (Effective value) *1	$I_{F(RMS)}$	1.57	A
Non-repetitive peak forward surge current *2	$I_{FSM}$	30	A
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

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



Marking Symbol: 3N

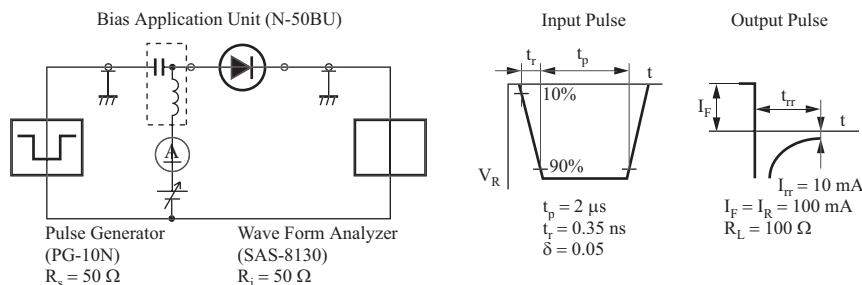
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 0.5$ A			0.48	V
	$V_{F2}$	$I_F = 1.1$ A			0.54	
	$V_{F3}$	$I_F = 1.5$ A			0.57	
Reverse current	$I_R$	$V_R = 40$ V			100	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 10$ V, $f = 1$ MHz		50		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



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