

# MA2J113 (MA113)

Silicon epitaxial planar type

For switching circuits

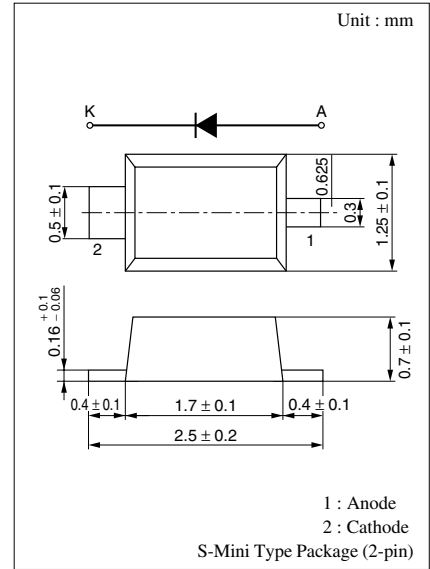
## ■ Features

- Small S-mini type package, allowing high-density mounting
- Ensuring the average forward current capacity  $I_{F(AV)} = 200$  mA
- High breakdown voltage ( $V_R = 80$  V)

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	80	V
Peak reverse voltage	$V_{RM}$	80	V
Forward current (DC)	$I_F$	200	mA
Peak forward current	$I_{FM}$	600	mA
Non-repetitive peak forward surge current*	$I_{FSM}$	1	A
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Noe) \* :  $t = 1$  s



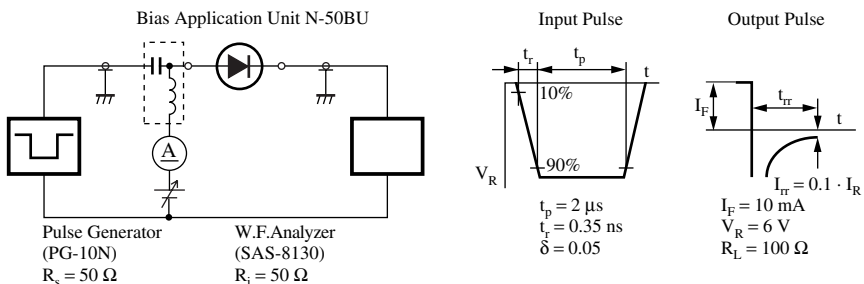
Marking Symbol: 1D

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_{R1}$	$V_R = 15$ V			50	nA
	$I_{R2}$	$V_R = 75$ V			500	nA
	$I_{R3}$	$V_R = 75$ V, $T_a = 100^\circ\text{C}$			100	$\mu\text{A}$
Forward voltage (DC)	$V_F$	$I_F = 200$ mA			1.1	V
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz			4	pF
Reverse recovery time*	$t_{rr}$	$I_F = 10$ mA, $V_R = 6$ V $I_{tr} = 0.1 \cdot I_R$ , $R_L = 100 \Omega$			10	ns

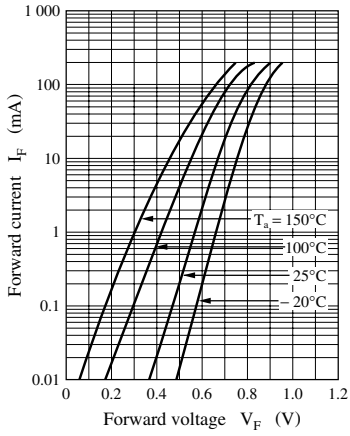
Note) 1. Rated input/output frequency: 100 MHz

2. \* :  $t_{rr}$  measuring circuit

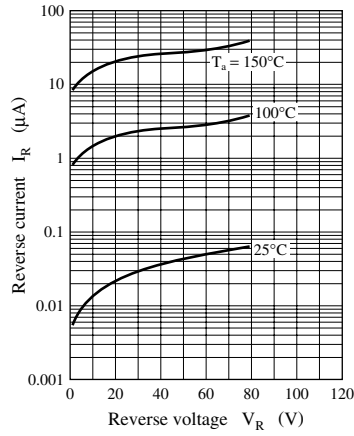


Note) The part number in the parenthesis shows conventional part number.

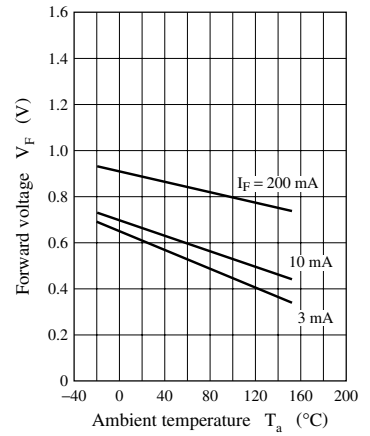
$I_F - V_F$



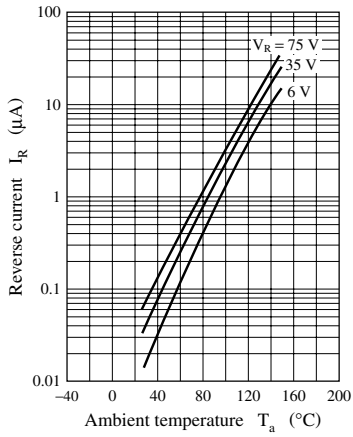
$I_R - V_R$



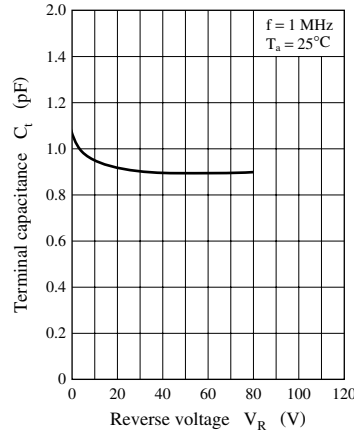
$V_F - T_a$



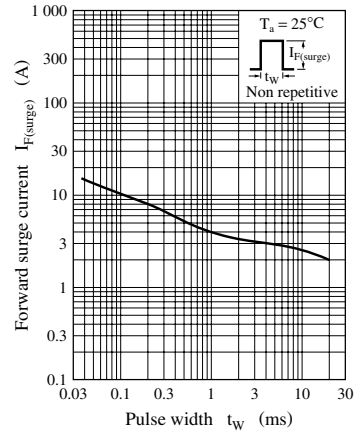
$I_R - T_a$



$C_t - V_R$



$I_{F(\text{surge})} - t_w$



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