

# MA2J111

## Silicon epitaxial planar type

For switching circuits

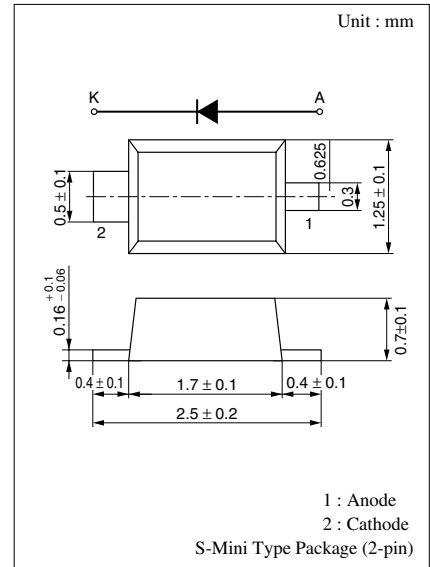
### ■ Features

- Small S-mini type package, allowing high-density mounting
- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance,  $C_t$
- 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
Average forward current	$I_{F(AV)}$	100	mA
Peak forward current	$I_{FM}$	225	mA
Non-repetitive peak forward surge current*	$I_{FSM}$	500	mA
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \* :  $t = 1$  s



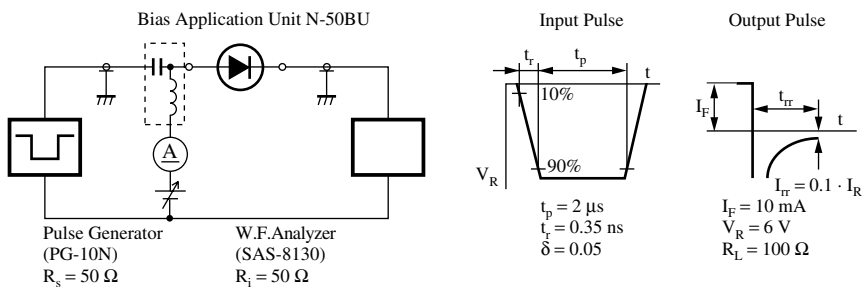
Marking Symbol: 1B

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

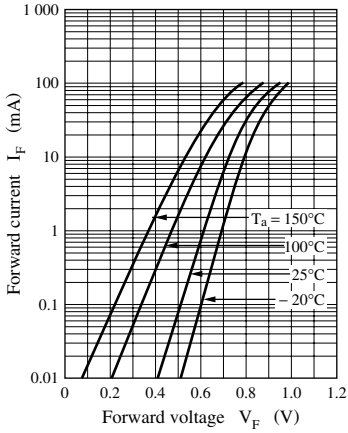
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 75$ V			100	nA
Forward voltage (DC)	$V_F$	$I_F = 100$ mA		0.95	1.2	V
Reverse voltage (DC)	$V_R$	$I_R = 100$ $\mu\text{A}$	80			V
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		0.6	1.2	pF
Reverse recovery time*	$t_{rr}$	$I_F = 10$ mA, $V_R = 6$ V $I_{rr} = 0.1 \cdot I_R$ , $R_L = 100$ $\Omega$			3	ns

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

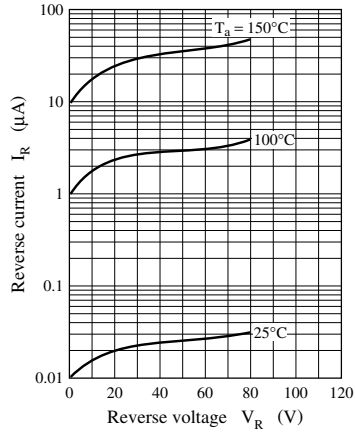
2. \* :  $t_{rr}$  measuring circuit



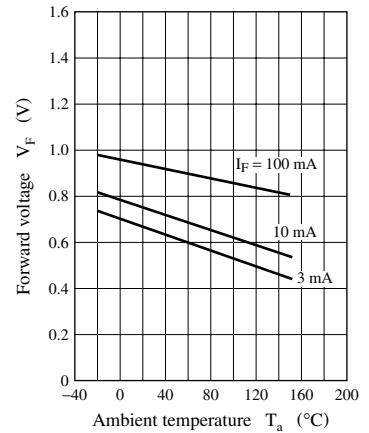
$I_F - V_F$



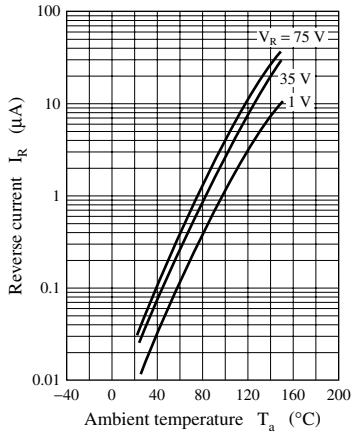
$I_R - V_R$



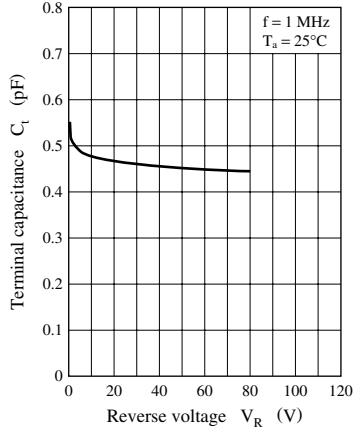
$V_F - T_a$



$I_R - T_a$



$C_t - V_R$



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

