

# MA27111

## Silicon epitaxial planar type

For high-speed switching circuits

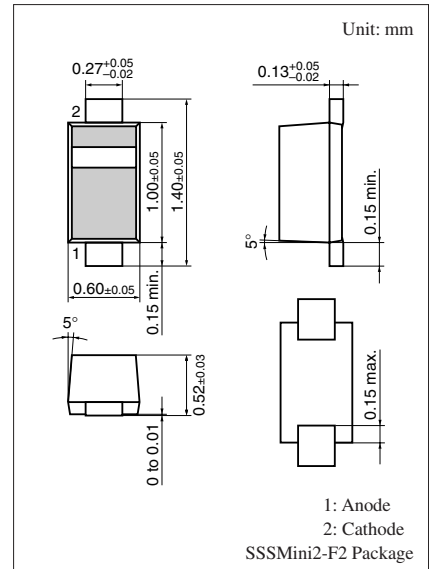
### ■ Features

- High-density mounting is possible
- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance  $C_t$

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	80	V
Maximum peak reverse voltage	$V_{RM}$	80	V
Forward current	$I_F$	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) \*:  $t = 1\text{ s}$



Marking Symbol: S

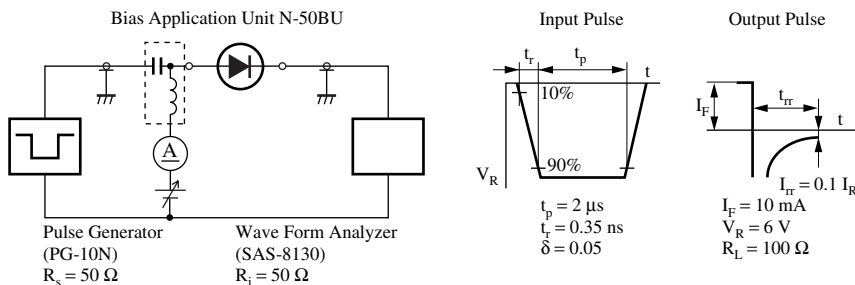
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

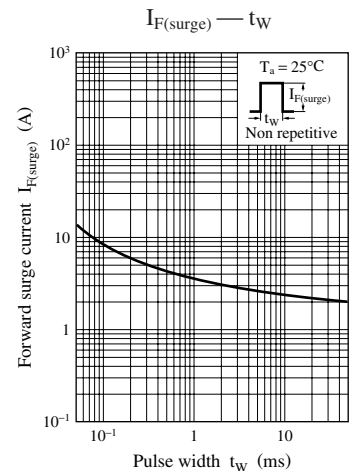
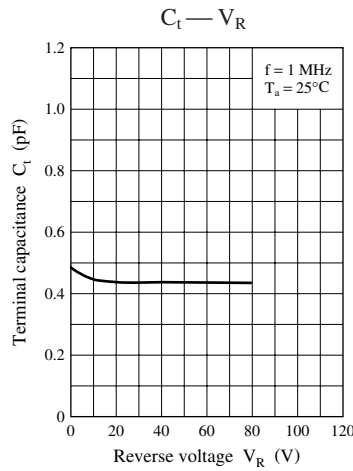
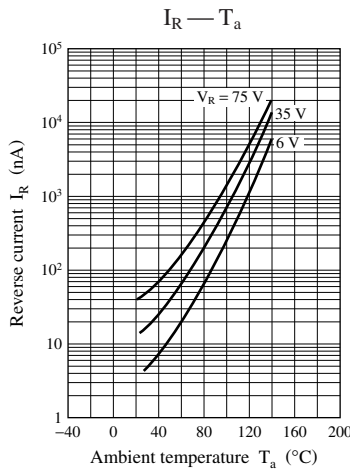
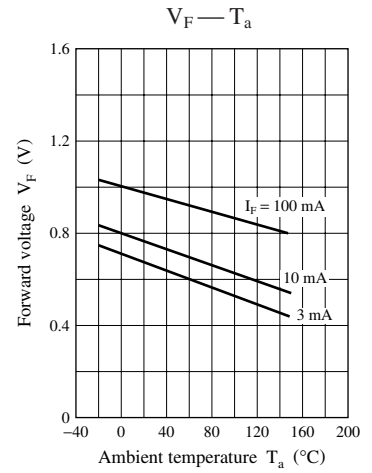
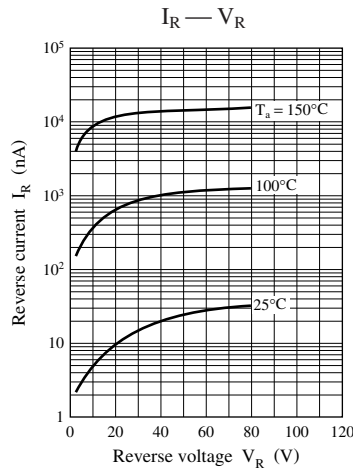
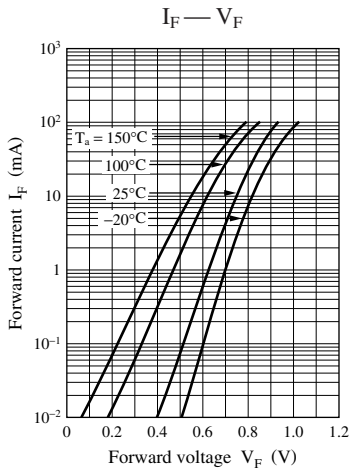
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100\text{ mA}$		0.95	1.20	V
Reverse voltage	$V_R$	$I_R = 100\ \mu\text{A}$	80			
Reverse current	$I_R$	$V_R = 75\text{ V}$			100	nA
Terminal capacitance	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$		0.6	2.0	pF
Reverse recovery time *	$t_{rr}$	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100\ \Omega$			3	ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 10 MHz.

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





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