

# MA4S111

Silicon epitaxial planar type

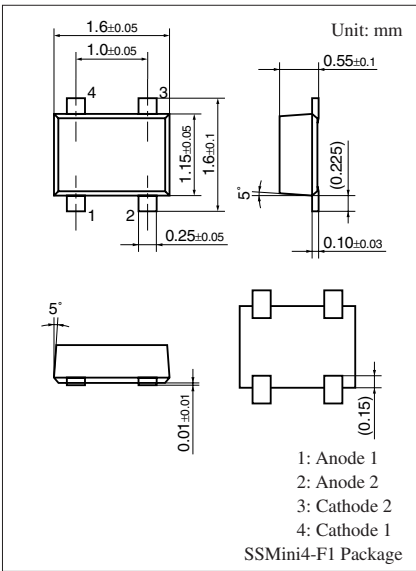
For switching circuits

## ■ Features

- Allowing high-density mounting
- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance  $C_t$

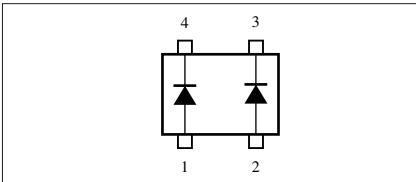
## ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	80	V
Maximum peak reverse voltage	$V_{RM}$	80	V
Forward current	Single	$I_F$	mA
	Double	75	
Repetitive peak forward current	Single	$I_{FRM}$	mA
	Double	170	
Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating ambient temperature	$T_{opr}$	-30 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



Marking Symbol: M1B

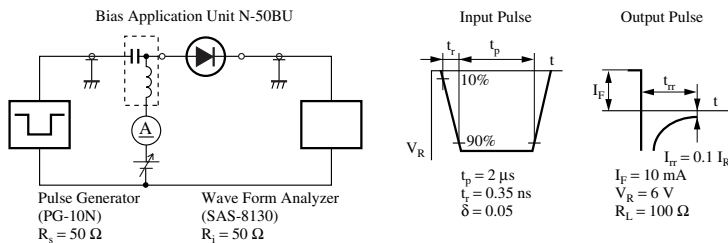
Internal Connection

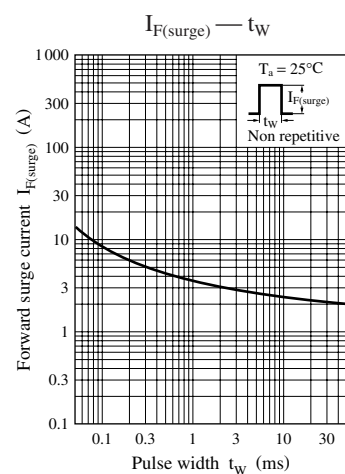
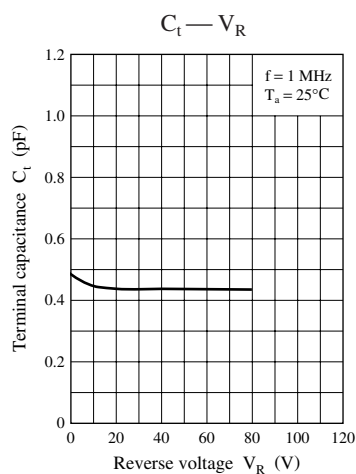
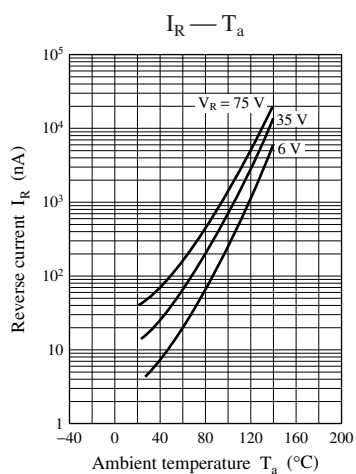
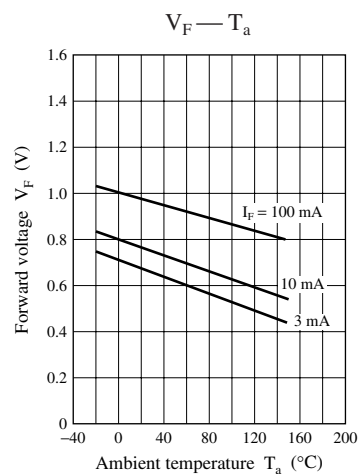
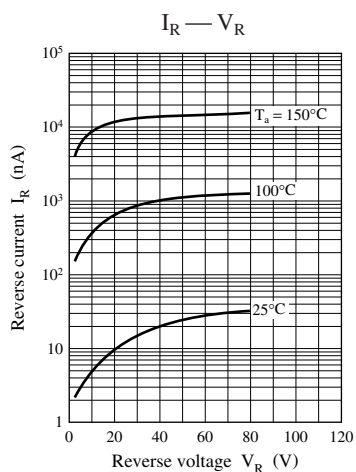
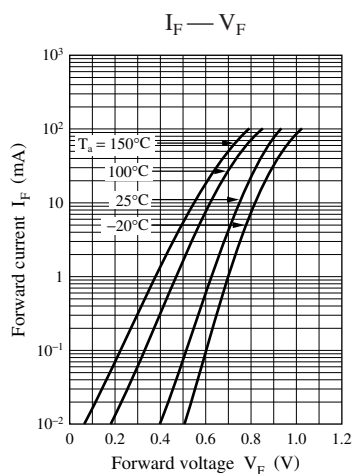


## ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$		0.95	1.2	V
Reverse voltage	$V_R$	$I_R = 100 \mu\text{A}$	80			V
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	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 method for diodes.  
 2. Absolute frequency of input and output is 100 MHz.  
 3. \*:  $t_{rr}$  measurement circuit





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