

MA4S111

Silicon epitaxial planar type

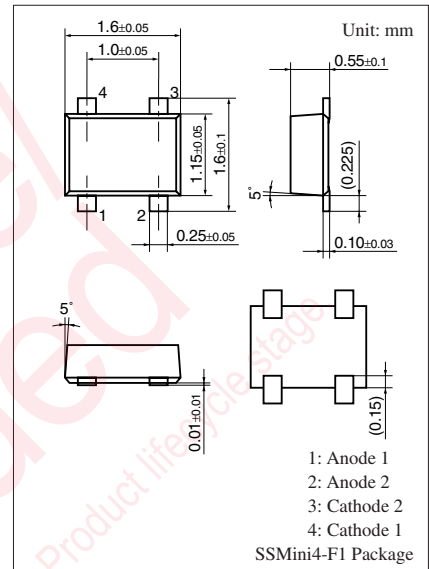
For switching circuits

■ Features

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

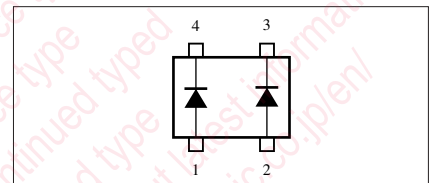
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	80	V
Maximum peak reverse voltage	V_{RM}	80	V
Forward current	Single	I_F	100
	Double		75
Repetitive peak forward current	Single	I_{FRM}	225
	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



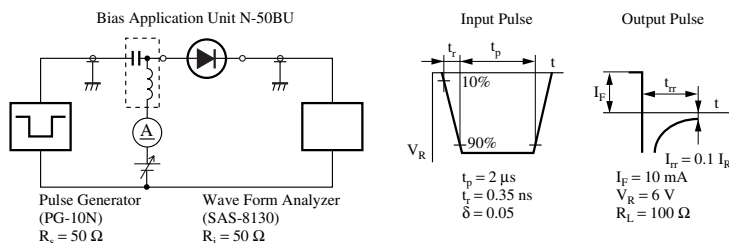
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

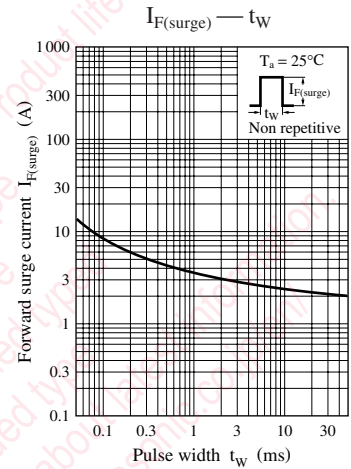
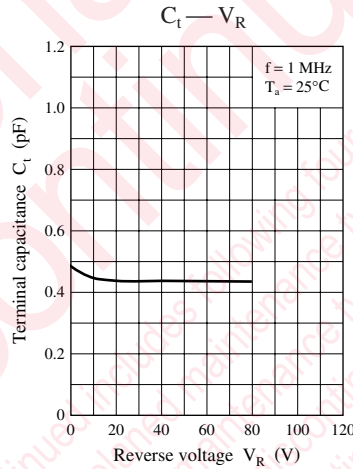
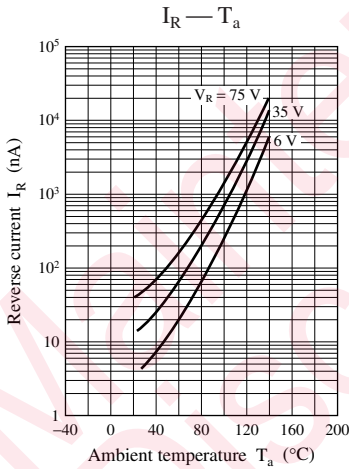
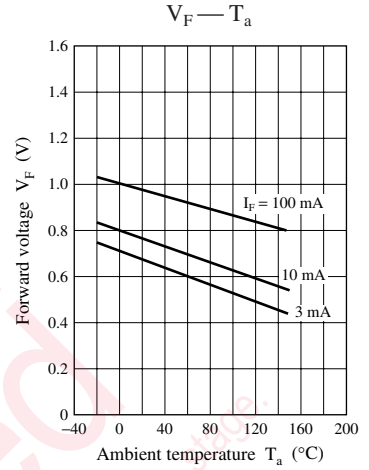
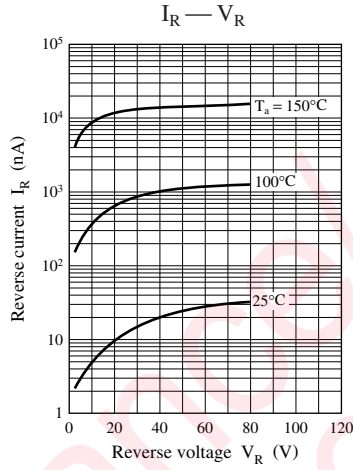
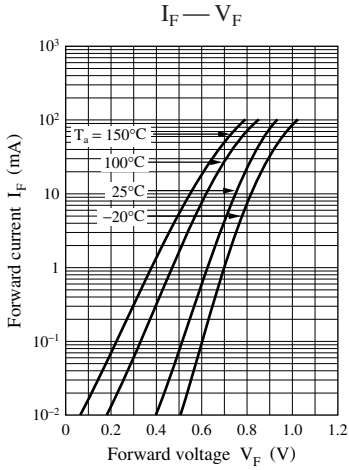
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100 \text{ mA}$		0.95	1.2	V
Reverse voltage	V_R	$I_R = 100 \mu\text{A}$	80			V
Reverse current	I_R	$V_R = 75 \text{ V}$			100	nA
Terminal capacitance	C_t	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		0.6	2	pF
Reverse recovery time *	t_{rr}	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{tr} = 0.1 I_R, R_L = 100 \Omega$			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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