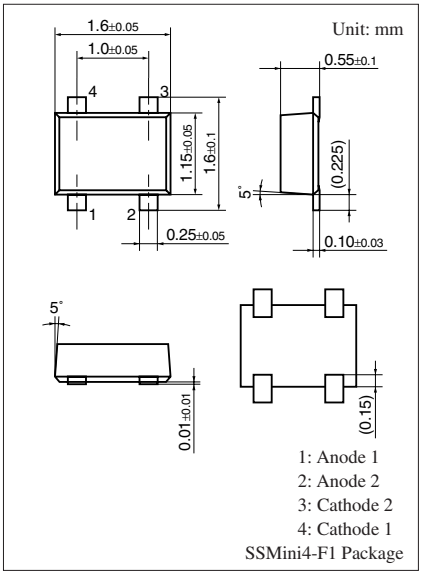
MA4S111

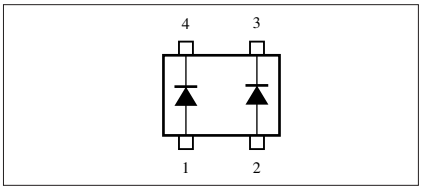
Silicon epitaxial planar type

For switching circuits



Marking Symbol: M1B

Internal Connection



■ Features

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

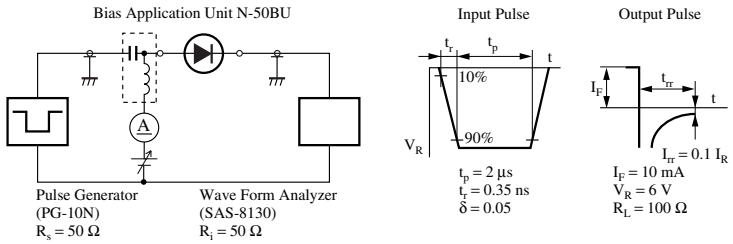
■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Reverse voltage		V_R	80	V
Maximum peak reverse voltage		V_{RM}	80	V
Forward current	Single	I_F	100	mA
	Double		75	
Repetitive peak forward current	Single	I_{FRM}	225	mA
	Double		170	
Junction temperature		T_j	150	°C
Operating ambient temperature		T_{opr}	−30 to +85	°C
Storage temperature		T_{stg}	−55 to +150	°C

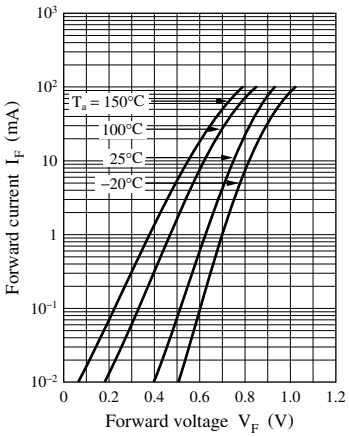
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 100 mA		0.95	1.2	V
Reverse voltage	V_R	I_R = 100 µA	80			V
Reverse current	I_R	V_R = 75 V			100	nA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		0.6	2	pF
Reverse recovery time *	t_{rr}	I_F = 10 mA, V_R = 6 V I_{rr} = 0.1 I_R , R_L = 100 Ω			3	ns

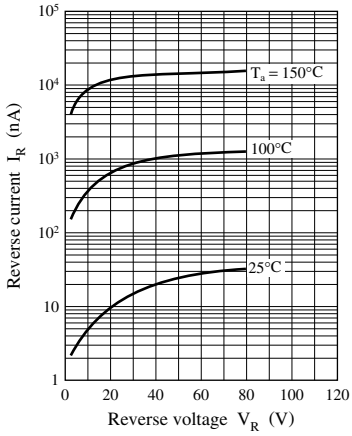
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.
2. Absolute frequency of input and output is 100 MHz.
3. *: t_{rr} measurement circuit



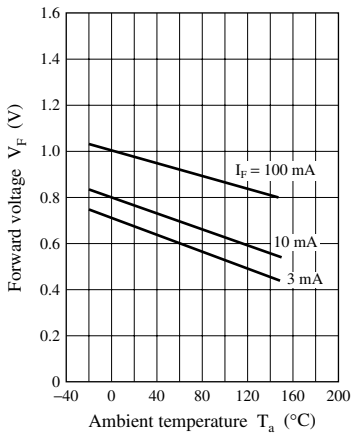
I_F — V_F



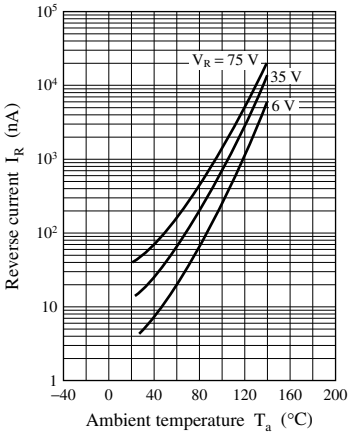
I_R — V_R



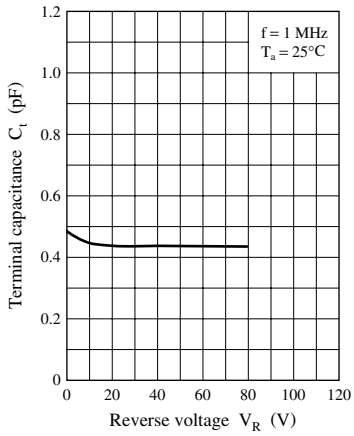
V_F — T_a



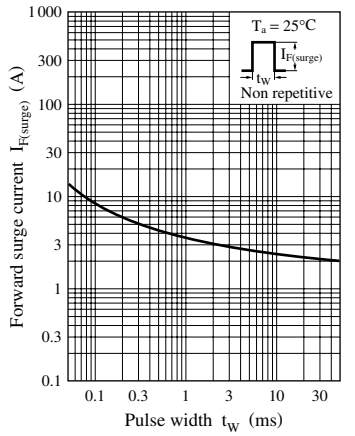
I_R — T_a



C_t — V_R



$I_{F(surge)}$ — t_W



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