#### Switching Diodes

# MA27111

### Silicon epitaxial planar type

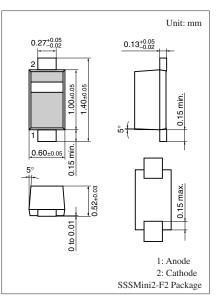
For high-speed switching circuits

#### Features

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

Parameter	Symbol	Rating	Unit			
Reverse voltage	V <sub>R</sub>	80	V			
Maximum peak reverse voltage	V <sub>RM</sub>	80	V			
Forward current	I <sub>F</sub>	100	mA			
Peak forward current	$I_{\rm FM}$	225	mA			
Non-repetitive peak forward surge current *	I <sub>FSM</sub>	500	mA			
Junction temperature	Tj	150	°C			
Storage temperature	T <sub>stg</sub>	-55 to +150	°C			





Marking Symbol: S

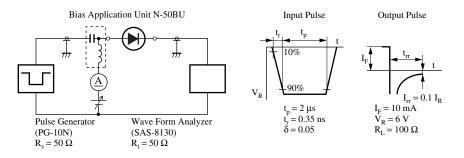
Note) \*: t = 1 s

Parameter	Symbol	Conditions	Min	Тур	Max	Unit	
Forward voltage	V <sub>F</sub>	$I_F = 100 \text{ mA}$		0.95	1.20	V	
Reverse voltage	V <sub>R</sub>	$I_R = 100 \ \mu A$	80				
Reverse current	I <sub>R</sub>	$V_R = 75 V$			100	nA	
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		0.6	2.0	pF	
Reverse recovery time *	t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns	
		$I_{\rm rr}$ = 0.1 $I_R$ , $R_L$ = 100 $\Omega$					

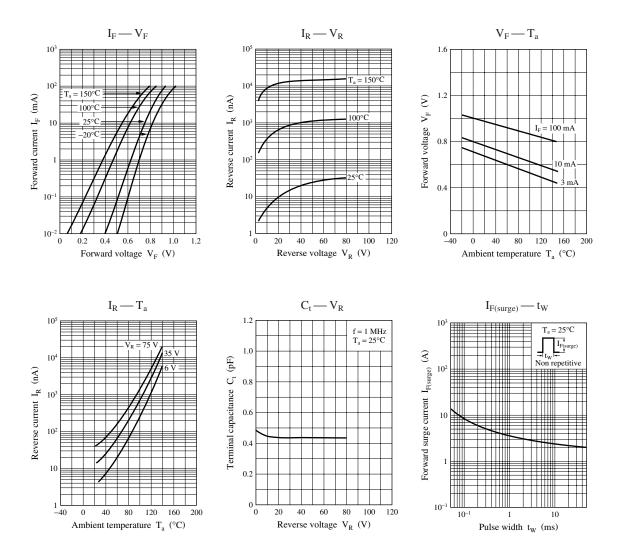
#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

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<sub>rr</sub> measurement circuit



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