# MA4SD10

Silicon epitaxial planar type

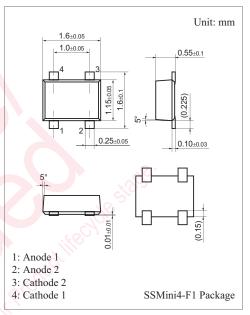
#### For super-high-speed switching circuits

#### Features

- Two isolated elements are contained in one package, allowing high-density mounting
- $\bullet$  Low forward voltage  $V_{\rm F}$

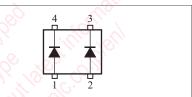
#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter		Symbol	Rating	Unit	
Reverse voltage		V <sub>R</sub>	20	V	
Repetitive peak reverse voltage		V <sub>RRM</sub>	20	V	
Forward current (Average)	Single	T	200	mA	
	Double	I <sub>F(AV)</sub>	150		
Peak forward current	Single		300	mA	
	Double	I <sub>FM</sub>	225		
Junction temperature		T <sub>j</sub>	125	°C	
Storage temperature		T <sub>stg</sub>	-55 to +125	°C	



#### Marking Symbol: M2A

#### Internal Connection



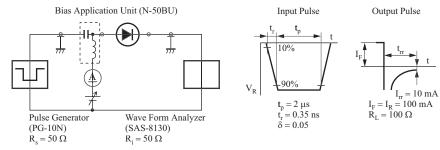
Parameter	Symbol	Conditions Min	Тур	Max	Unit
Forward voltage	V <sub>F1</sub>	$I_F = 5 \text{ mA}$		0.27	V
	V <sub>F2</sub>	$I_{\rm F} = 100 \text{ mA}$		0.40	
	$V_{F3}$	I <sub>F</sub> = 200 mA		0.47	
Reverse current	I <sub>R</sub>	$V_R = 10 V$		20	μΑ
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$	25		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}$ $R_L = 100 \Omega$	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  $250\ \text{MHz}$ 

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

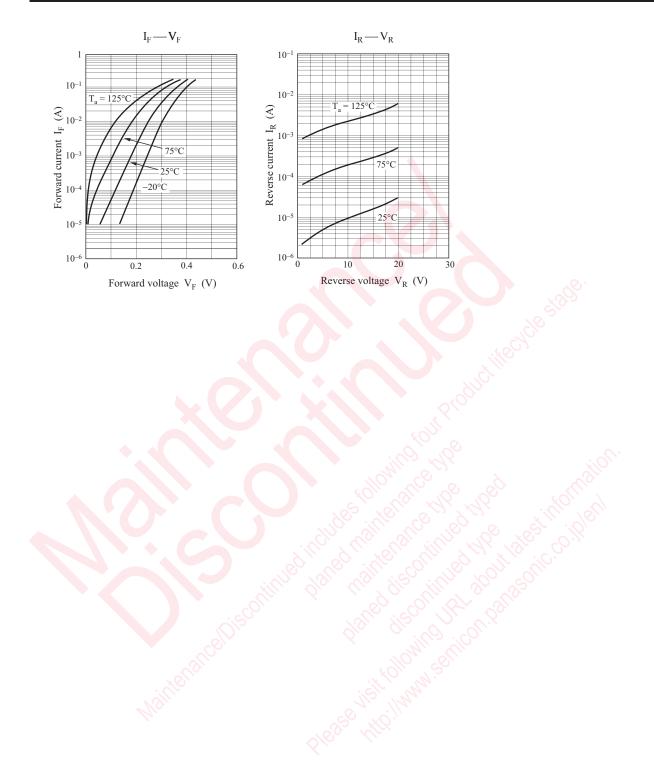
3. \*: t<sub>rr</sub> measurement circuit



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

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## **Panasonic**



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