## **MA27D29**

## Silicon epitaxial planar type

#### For super high speed switching

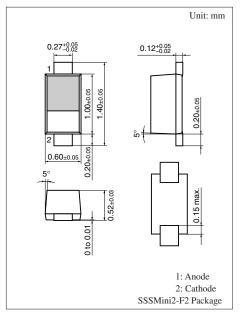
#### ■ Features

- Low forward voltage:  $V_F < 0.42 \text{ V}$  (at  $I_F = 100 \text{ mA}$ )
- $\bullet$  Optimum for high frequency rectification because of its short reverse recovery time  $t_{rr}\,.$

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Repetitive peak reverse voltage	V <sub>RRM</sub>	30	V
Forward current (Average)	I <sub>F(AV)</sub>	100	mA
Peak forward current	$I_{FM}$	200	mA
Non-repetitive peak forward	I <sub>FSM</sub>	1	A
surge current *			
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note) \*: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)



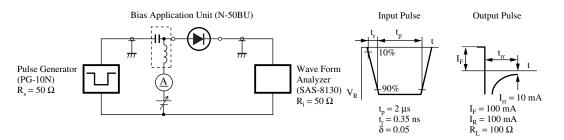
Marking Symbol: 8M

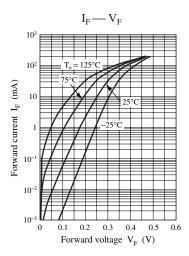
#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

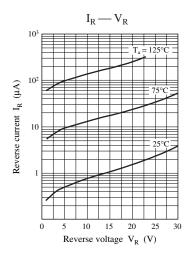
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 10 \text{ mA}$		0.25	0.29	V
	V <sub>F2</sub>	I <sub>F</sub> = 100 mA		0.39	0.42	V
Reverse current	I <sub>R1</sub>	$V_R = 10 \text{ V}$			25	μΑ
	$I_{R2}$	$V_R = 30 \text{ V}$			120	μΑ
Terminal capacitance	C <sub>t</sub>	$V_R = 0 \text{ V, } f = 1 \text{ MHz}$		11		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		1		ns
		$I_{rr} = 10 \text{ mA}, R_{L} = 100 \Omega$				

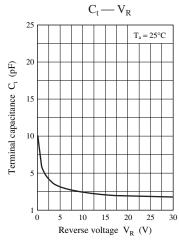
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

- 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. Absolute frequency of input and output is 250 MHz
- 4. \*:  $t_{rr}$  measurement circuit









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