# MA27D29

### Silicon epitaxial planar type

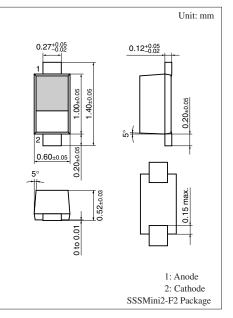
For super high speed switching

#### Features

- Low forward voltage:  $V_F < 0.42$  V (at  $I_F = 100$  mA)
- Optimum for high frequency rectification because of its short reverse recovery time t<sub>rr</sub>.

The solute maximum matrices $r_a = 25$ C						
Parameter	Symbol	Rating	Unit			
Reverse voltage	V <sub>R</sub>	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 surge current *	I <sub>FSM</sub>	1	А			
Junction temperature	т	125	°C			
1	T <sub>j</sub>		-			
Storage temperature	T <sub>stg</sub>	-55 to +125	°C			

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



Marking Symbol: 8M

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

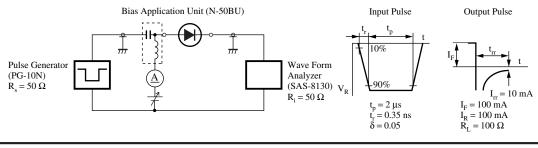
#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F1</sub>	$I_F = 10 \text{ mA}$		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 <sub>R</sub> = 10 V			25	μΑ
	I <sub>R2</sub>	$V_R = 30 V$			120	μΑ
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		11		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		1		ns
		$I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$				

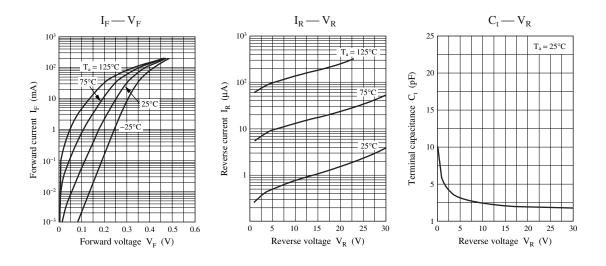
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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<sub>rr</sub> measurement circuit



### Panasonic



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