# **MA4X160** (MA160)

## Silicon epitaxial planar type

For high-speed switching circuits

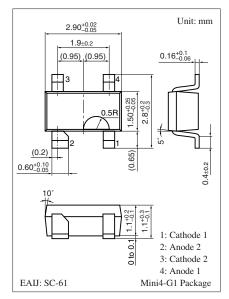
#### ■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- Centrosymmetrical wiring, allowing to free from the taping direction
- Short reverse recovery time t<sub>rr</sub>
- Small terminal capacitance C<sub>t</sub>

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

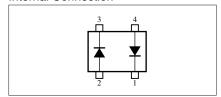
Parameter		Symbol	Rating	Unit
Reverse voltage		$V_R$	40	V
Maximum peak reverse voltage		$V_{RM}$	40	V
Forward current	Single	I <sub>F(AV)</sub>	100	mA
(Average)	Double		75	
Repetitive peak	Single	$I_{FRM}$	225	mA
forward current	Double		170	
Non-repetitive peak	Single	I <sub>FSM</sub>	500	mA
forward surge current *	Double		375	
Junction temperature		T <sub>j</sub>	150	°C
Storage temperature		$T_{stg}$	-55 to +150	°C

Note) \*: t = 1 s



Marking Symbol: M1D

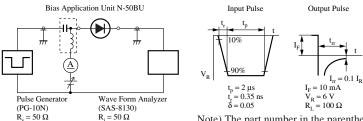
#### Internal Connection



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

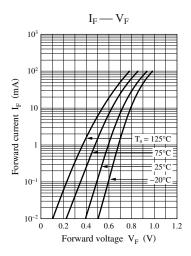
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 100 \text{ mA}$		0.95	1.20	V
Reverse voltage	$V_R$	$I_R = 100 \mu A$	40			V
Reverse current	$I_R$	$V_R = 35 \text{ V}$			0.1	μΑ
Terminal capacitance	C <sub>t</sub>	$V_R = 0 V, f = 1 MHz$		0.9	2.0	pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns
		$I_{rr} = 0.1 I_R$ , $R_L = 100 \Omega$				

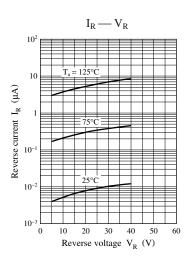
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.
  - 2. Absolute frequency of input and output is 100 MHz.
  - 3. \*: t<sub>rr</sub> measurement circuit

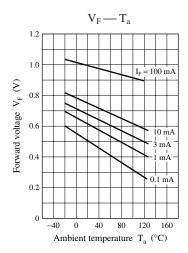


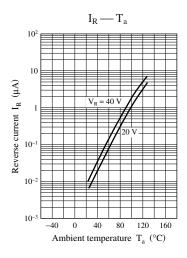
Note) The part number in the parenthesis shows conventional part number.

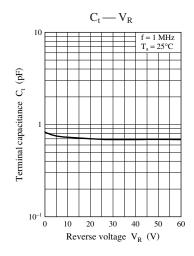
MA4X160 Panasonic

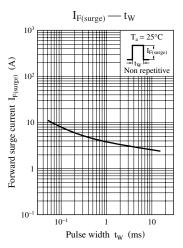












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