# MA4Z159 (MA4S159)

## Silicon epitaxial planar type

## For switching circuits

#### ■ Features

- Two isolated elements contained in one package, allowing highdensity mounting
- Flat lead type, resulting in improved mounting efficiency and solderability with the high-speed mounting machine
- 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		$V_R$	80	V
Maximum peak reverse voltage		$V_{RM}$	80	V
Forward current	Single	$I_F$	100	mA
	Double		75	
Peak forward	Single	$I_{FM}$	225	mA
current	Double		170	
Non-repetitive peak	Single	$I_{FSM}$	500	mA
forward surge current*	Double		375	
Junction temperature		T <sub>j</sub>	150	°C
Storage temperature		$T_{stg}$	-55 to +150	°C

### Package

Code

SMini4-F1

Pin Name

1: Anode 1 3: Cathode 2 2: Anode 2 4: Cathode 1

■ Marking Symbol: M1B

#### ■ Internal Connection



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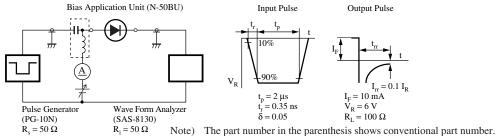
Note) \*: t = 1 s

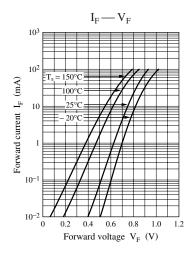
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

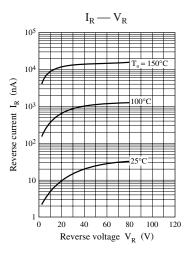
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	I <sub>F</sub> = 100 mA		0.95	1.20	V
Reverse voltage	V <sub>R</sub>	$I_R = 100 \mu A$	80			V
Reverse current	$I_R$	V <sub>R</sub> = 75 V			0.1	μΑ
Terminal capacitance	C <sub>t</sub>	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		0.9	2.0	pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns
		$I_{rr} = 0.1 I_R, R_L = 100 \Omega$				

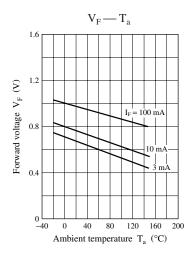
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

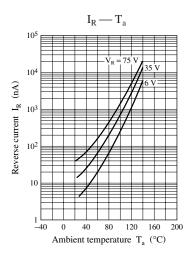
- 2. Absolute frequency of input and output is 100 MHz.
- 3. \*: t<sub>rr</sub> measurement circuit

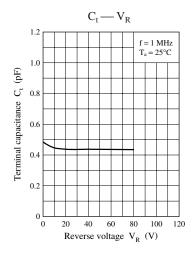


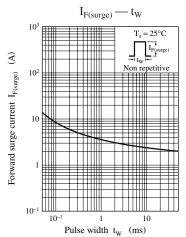












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