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# **MA3S137** (MA137)

### Silicon epitaxial planar type

For high-speed switching circuits

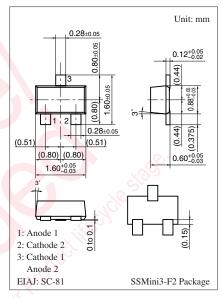
#### ■ Features

- Two isolated elements contained in one package, allowing highdensity mounting
- Two diodes are connected in series in the package

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

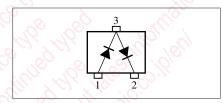
Parameter		Symbol	Rating	Unit
Reverse voltage		$V_R$	80	V
Maximum peak reverse voltage		V <sub>RM</sub>	80	V
Forward current	Single	$I_{\mathrm{F}}$	100	mA
	Series		65	
Peak forward	Single	$I_{FM}$	225	mA
current	Series		145	
Non-repetitive peak	Single	$I_{FSM}$	500	mA
forward surge current *	Series		325	i i
Junction temperature		T <sub>j</sub>	150	°C/O
Storage temperature		T <sub>stg</sub>	-55 to +150	°C

Note) \*: t = 1 s



Marking Symbol: MS

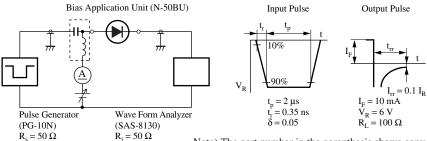
#### Internal Connection



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

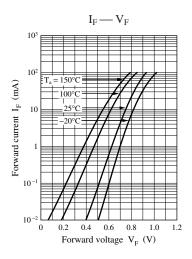
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	I <sub>F</sub> = 100 mA	1.90		1.2	V
Reverse voltage	$V_R$	$I_R = 100 \mu A$	80			V
Reverse current	$I_R$	V <sub>R</sub> = 75 V			100	nA
Terminal capacitance	C <sub>t</sub>	$V_R = 0 \text{ V, f} = 1 \text{ MHz}$			2	pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$			3	ns
"VSI		$I_{rr} = 0.1 I_R$ , $R_L = 100 \Omega$				

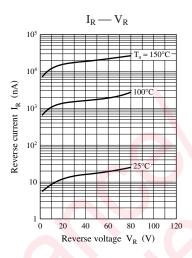
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
  - 2. Absolute frequency of input and output is 100 MHz.
  - 3. \*: t<sub>rr</sub> measurement circuit

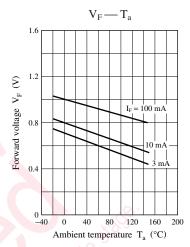


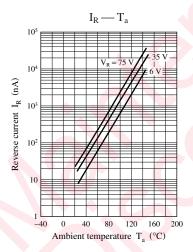
Note) The part number in the parenthesis shows conventional part number.

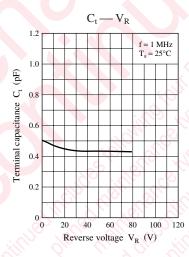
## **Panasonic**

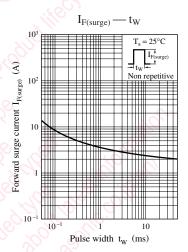












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