# **MA3J142K** (MA142K)

### Silicon epitaxial planar type

For switching circuits

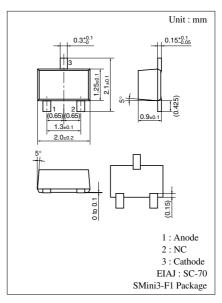
#### ■ Features

- Small S-mini type package allowing high density mounting
- Short reverse recovery time t<sub>rr</sub>
- Small terminal capacitance, C<sub>t</sub>

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

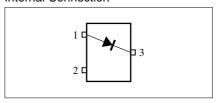
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V <sub>R</sub>	80	V
Peak reverse voltage	$V_{RM}$	80	V
Forward current (DC)	$I_{F}$	100	mA
Peak forward current	$I_{FM}$	225	mA
Non-repetitive peak forward surge current*	I <sub>FSM</sub>	500	mA
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Note) \* : t = 1 s



Marking Symbol: MI

#### Internal Connection

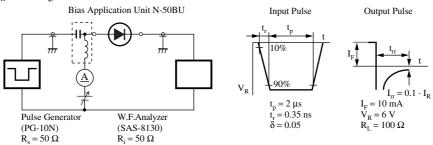


#### ■ Electrical Characteristics $T_a = 25$ °C

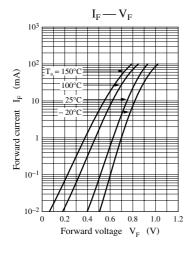
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 75 \text{ V}$			100	nA
Forward voltage (DC)	$V_{\rm F}$	$I_F = 100 \text{ mA}$			1.2	V
Reverse voltage (DC)	$V_R$	$I_R = 100 \mu A$	80			V
Terminal capacitance	C <sub>t</sub>	$V_R = 0 V, f = 1 MHz$			2	pF
Reverse recovery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

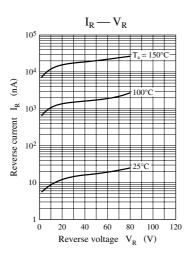
Note) 1. Rated input/output frequency: 100 MHz

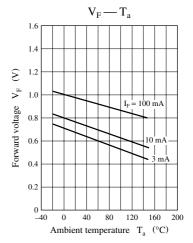
2. \*: t<sub>rr</sub> measuring circuit

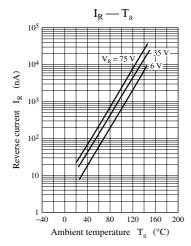


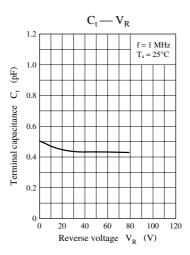
Note) The part number in the parenthesis shows conventional part number.

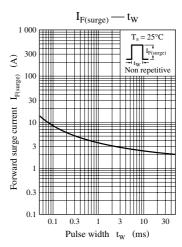












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