Switching Diodes

# MA6Z121 (MA6S121)

### Silicon epitaxial planar type

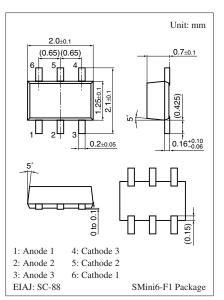
#### For switching circuit

#### Features

- Three 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
- $\bullet$  Short reverse recovery time  $t_{\rm rr}$
- $\bullet$  Small terminal capacitance  $C_{t}$

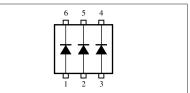
Parameter	Symbol	Rating	Unit
Reverse voltage	V <sub>R</sub>	80	V
Maximum peak reverse voltage	V <sub>RM</sub>	80	V
Forward current *1	I <sub>F</sub>	100	mA
Peak forward current *1	$I_{\rm FM}$	225	mA
Non-repetitive peak forward surge current *1, 2	I <sub>FSM</sub>	500	mA
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

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



#### Marking Symbol: M2D

#### Internal Connection



Note) \*1: Value for single diode

\*2: t = 1 s

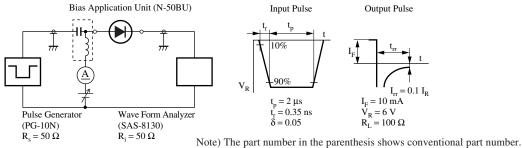
#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

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

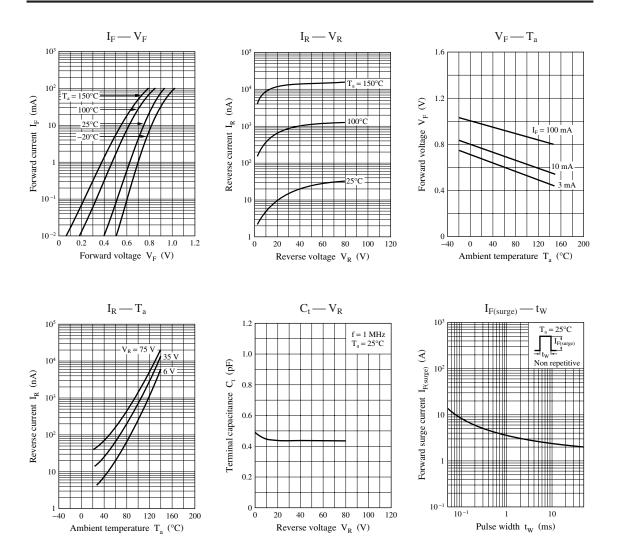
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 100 MHz.

3. \*: t<sub>rr</sub> measurement circuit



### Panasonic



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