Switching Diodes

MA6Z121 (MA6S121)

Silicon epitaxial planar type

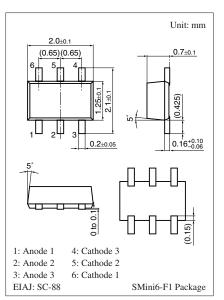
For switching circuit

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}

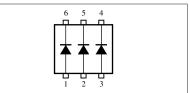
Parameter	Symbol	Rating	Unit
Reverse voltage	V _R	80	V
Maximum peak reverse voltage	V _{RM}	80	V
Forward current *1	I _F	100	mA
Peak forward current *1	$I_{\rm FM}$	225	mA
Non-repetitive peak forward surge current *1, 2	I _{FSM}	500	mA
Junction temperature	Tj	150	°C
Storage temperature	T _{stg}	-55 to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

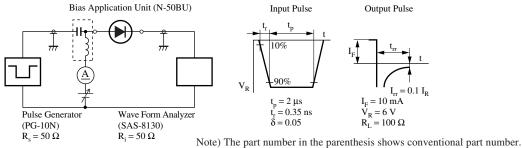
Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

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

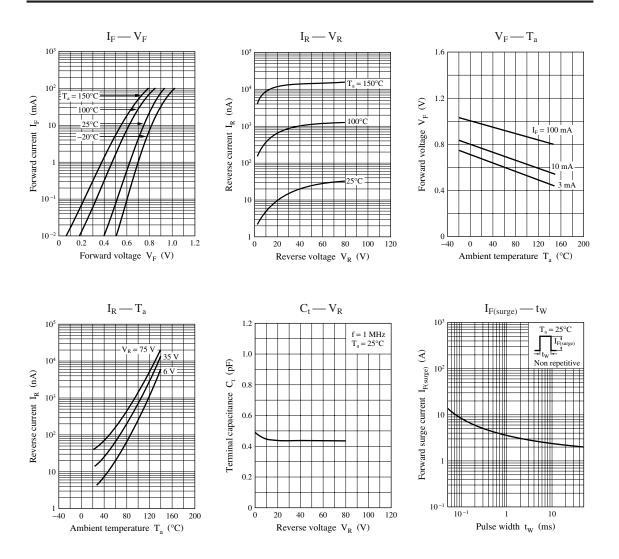
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

3. *: t_{rr} measurement circuit



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