

MA5J002E

Silicon epitaxial planar type

For high speed switching circuits

■ Features

- Includes 4 elements of cathode common connection
- Parts reduction is possible
- Ideal for surge voltage absorption

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

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_{FM}	225	mA
Non-repetitive peak forward surge current *1, 2	I_{FSM}	500	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Operating ambient temperature	T_{opr}	-25 to +105	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *1: Value in single diode used.

*2: $t = 1\text{ s}$

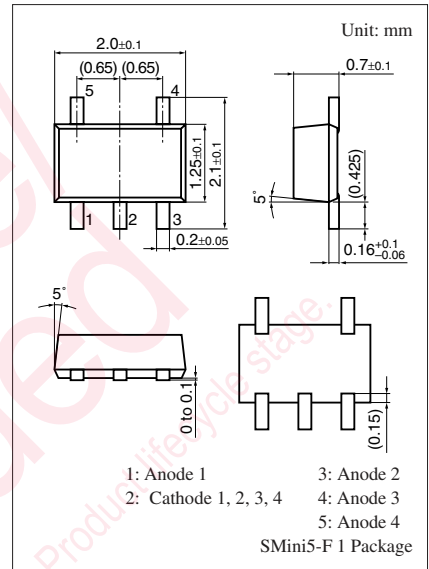
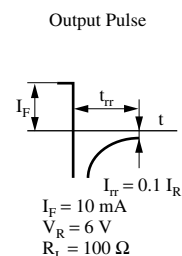
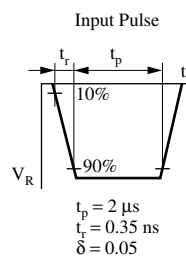
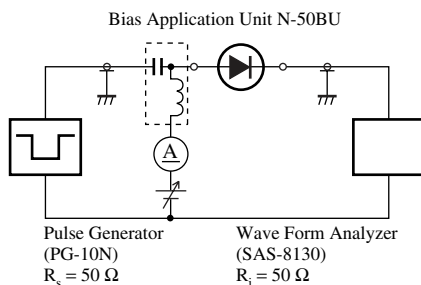
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

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

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

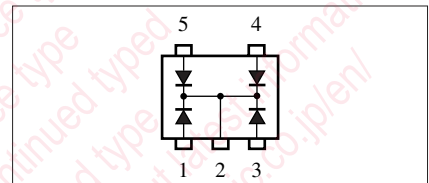
2. Absolute frequency of input and output is 100 MHz.

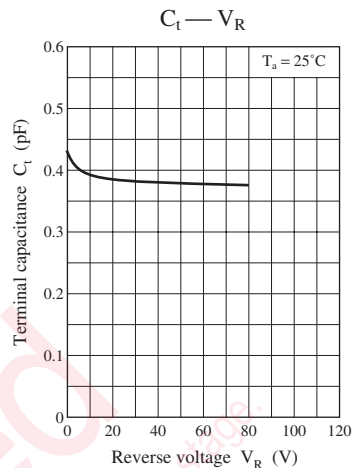
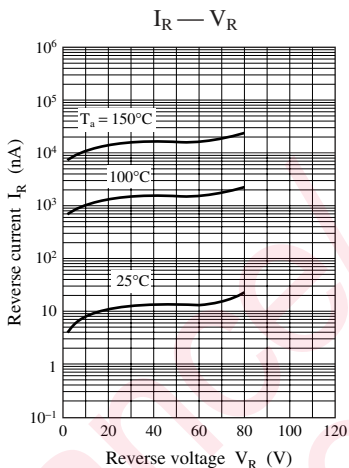
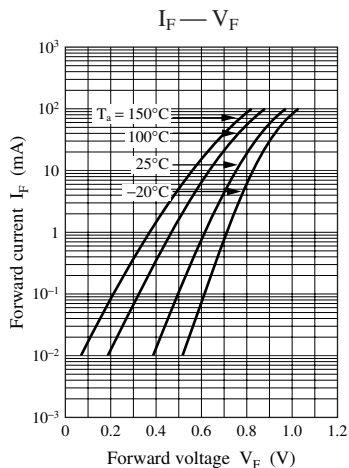
3. *: t_{rr} measurement circuit



Marking Symbol: M5B

Internal Connection





Maintenance/Discontinued

includes following four Product lifecycle types:

- planned maintenance type
- maintenance type
- planned discontinued type
- discontinued type

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