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# 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:  $t = 1\text{ s}$

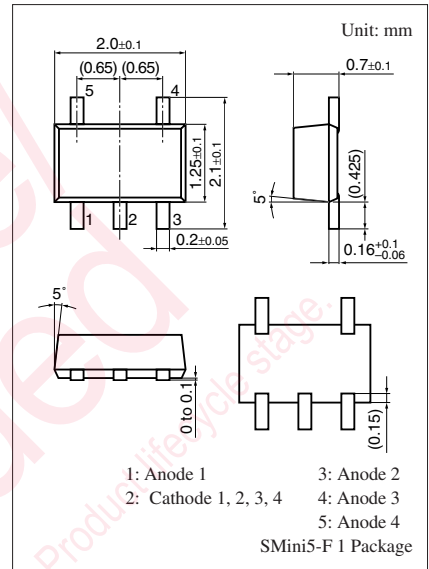
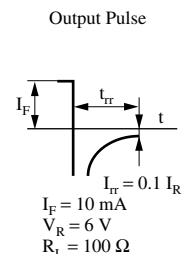
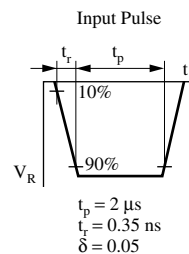
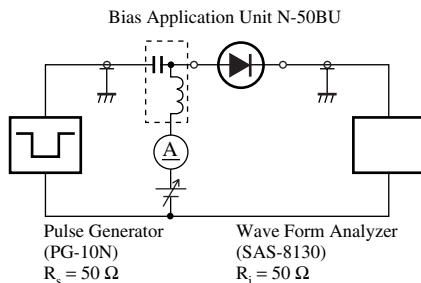
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

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.

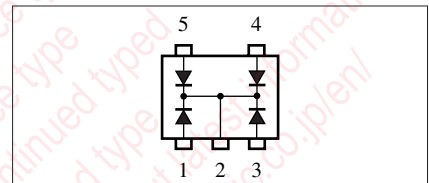
2. Absolute frequency of input and output is 100 MHz.

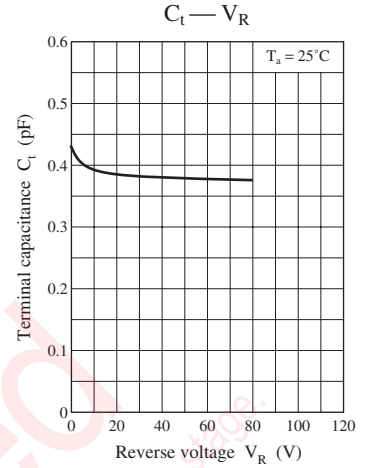
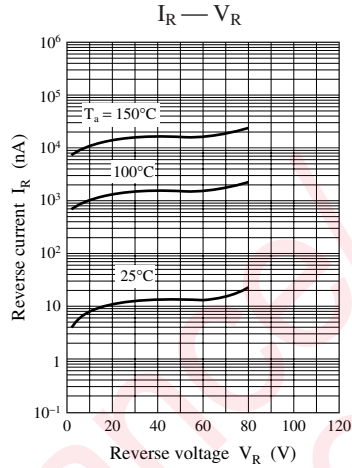
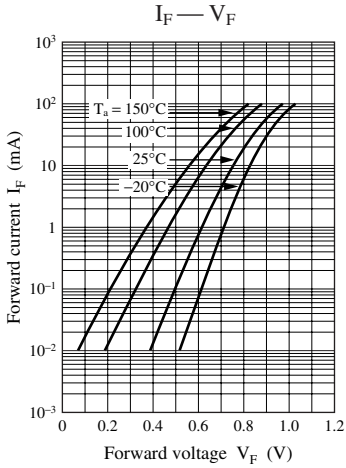
3. \*:  $t_{rr}$  measurement circuit



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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