

# MA5J002E

## Silicon epitaxial planar type

For high speed switching circuit

### ■ Features

- S-Mini type 5-pin package
- 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 (DC)	$V_R$	80	V
Peak reverse voltage	$V_{RM}$	80	V
Forward current (DC) *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 per a diode

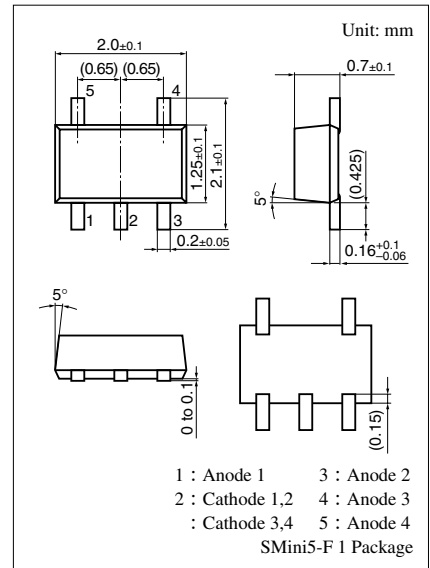
\*2:  $t = 1 \text{ s}$

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

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

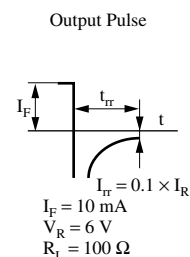
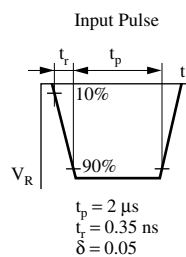
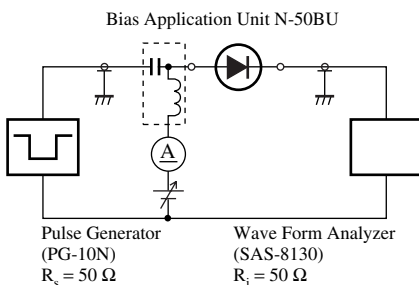
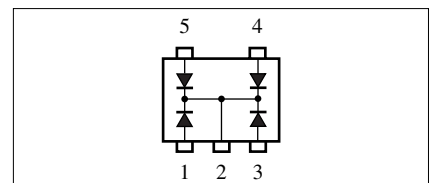
Note) 1. Rated input/output frequency: 100 MHz

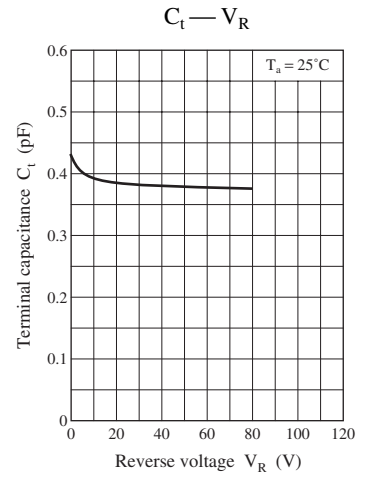
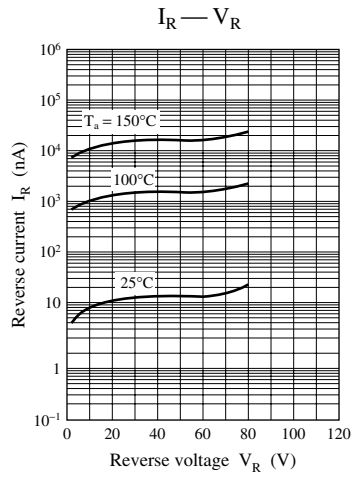
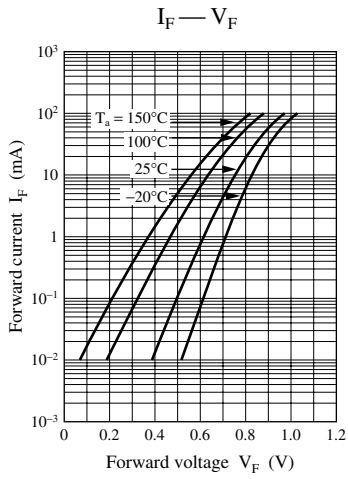
2. \*:  $t_{rr}$  measuring instrument



Marking Symbol: M5B

Internal Connection





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