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# MA4SD01

## Silicon epitaxial planar type

For high speed switching

### ■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- Two MA3S781 (MA781) is contained in one package (of a type in the same direction)

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Maximum peak reverse voltage	$V_{RM}$	30	V
Forward current	Single	$I_F$	30
	Double		20
Peak forward current	Single	$I_{FM}$	150
	Double		110
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

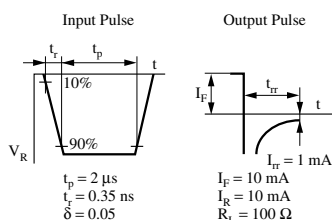
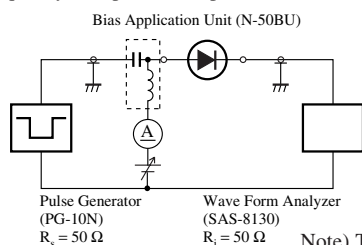
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 1 \text{ mA}$			0.35	V
	$V_{F2}$	$I_F = 30 \text{ mA}$			0.9	
Reverse current	$I_R$	$V_R = 30 \text{ V}$			0.5	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$		1.5		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 10 \text{ mA}$ $I_{tr} = 1 \text{ mA}, R_L = 100 \Omega$		1.0		ns
Detection efficiency	$\eta$	$V_{IN} = 3 \text{ V}_{(peak)}, f = 30 \text{ MHz}$ $R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$		65		%

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

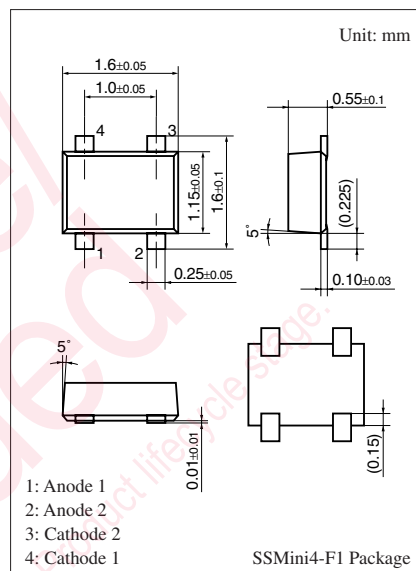
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 2 GHz.

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

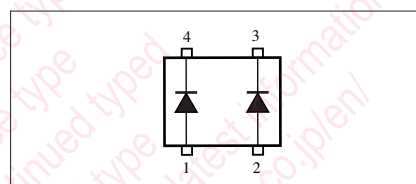


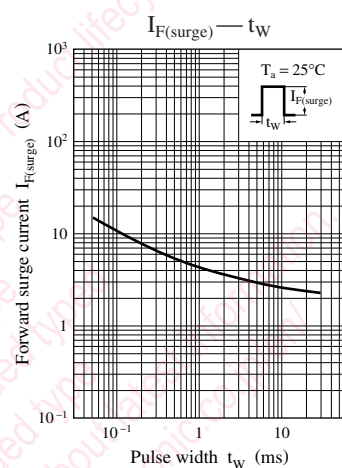
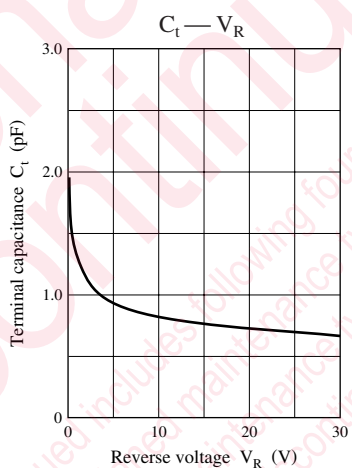
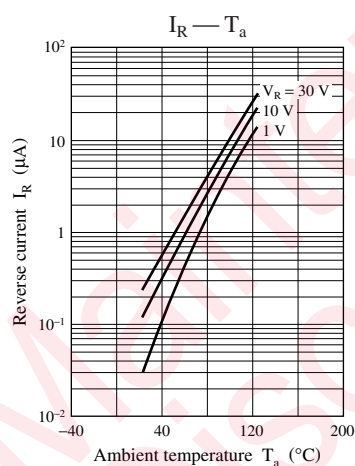
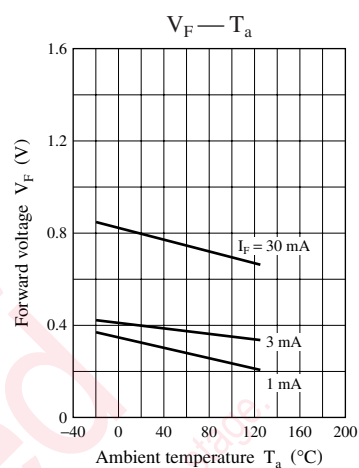
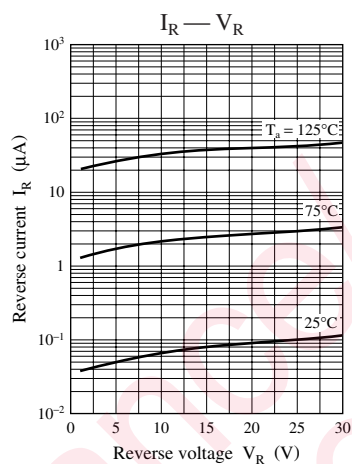
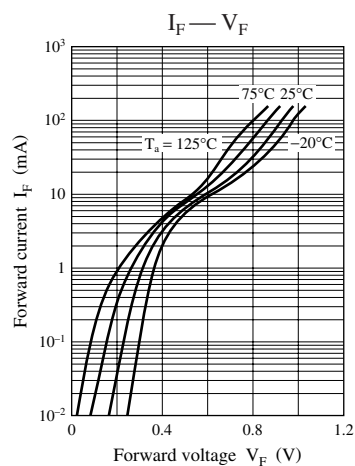
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1N

Internal Connection







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