

# MA4ZD03

## Silicon epitaxial planar type

For high speed switching

For small type power supply

For DC/DC converter

### ■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- $I_F = 100$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time ( $t_{rr}$ )

### ■ Package

- Code SMini4-F1
- Pin Name
 

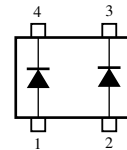
1: Anode 1	3: Cathode 2
2: Anode 2	4: Cathode 1

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

Parameter	Symbol	Rating	Unit
Forward current	Single	$I_F$ 100	mA
	Double	75	
Peak forward current	Single	$I_{FM}$ 300	mA
	Double	225	
Non-repetitive peak forward surge current*	Single	$I_{FSM}$ 1	A
	*Double	0.75	
Reverse voltage	$V_R$	45	V
Repetitive peak reverse voltage	$V_{RRM}$	45	V
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

### ■ Marking Symbol: M5A

### ■ Internal Connection



Note) \*: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

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

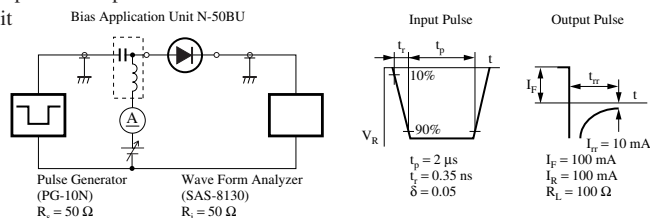
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	$I_R$	$V_R = 40$ V			5	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 100$ mA		0.54	0.60	V
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		12	18	pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA $I_{tr} = 10$ mA, $R_L = 100$ $\Omega$		1.2		ns

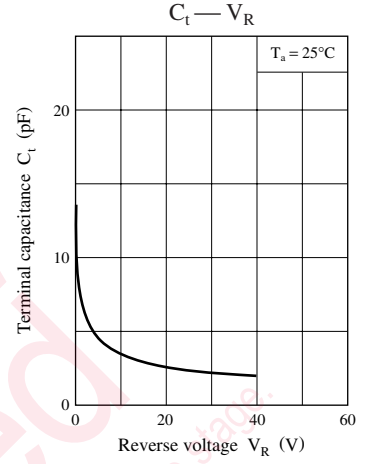
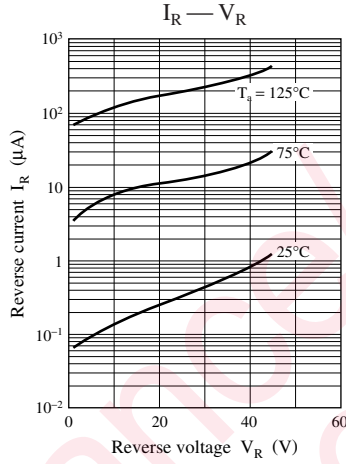
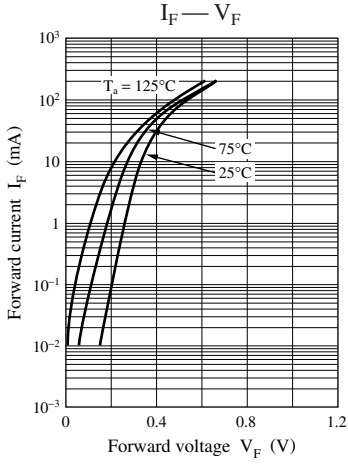
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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 250 MHz.

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





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