## MA4ZD14

## Silicon epitaxial planar type

For high speed switching

#### ■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- Low forward voltage:  $V_F < 0.40 \text{ V}$

## ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter		Symbol	Rating	Unit	
Reverse voltage		V <sub>R</sub>	20	V	
Repetitive peak reverse-voltage		V <sub>RRM</sub>	20	V	
Forward current	Single	$I_{F}$	100	mA	
	Double *1		75		
Peak forward	Single	$I_{FM}$	300	mA	
current	Double *1		225		
Non-repetitive peak	Single	$I_{FSM}$	1	A	
forward surge current *2	Double *1		0.75	i di	
Junction temperature		$T_{j}$	125	°C	
Storage temperature		$T_{stg}$	-55 to +125	°C	

Note) \*1: Value of each diode in double diodes used.

#### Package

- Code
   SMini4-F1
- Pin Name

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

■ Marking Symbol: M5D

#### ■ Internal Connection

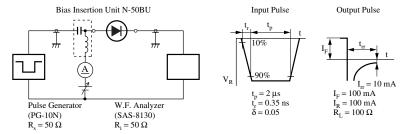


### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

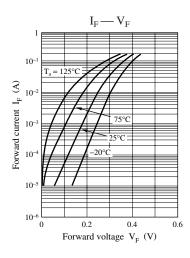
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	V <sub>R</sub> = 10 V	1.00		20	μΑ
Forward voltage	$V_{F1}$	$I_F = 5 \text{ mA}$			0.27	V
	$V_{F2}$	I <sub>F</sub> = 100 mA			0.40	
Terminal capacitance	$C_{t}$	$V_R = 0 V, f = 1 MHz$		25		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		3		ns
		$I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$				

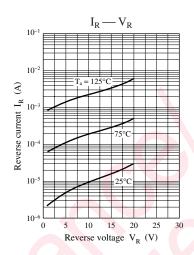
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
  - 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
  - 3. Absolute frequency of input and output is 250 MHz.

4.\*: t<sub>rr</sub> measurement circuit



<sup>\*2:</sup> The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)





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