## MA3ZD12

## Silicon epitaxial planar type

For high speed switching

#### ■ Features

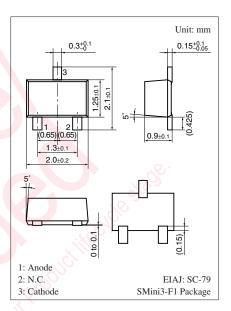
- Forward current (Average)  $I_{F(AV)} = 700$  mA rectification is possible
- Low forward voltage:  $V_F < 0.45 \text{ V}$
- High-density mounting is possible

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	20	V
Repetitive peak reverse voltage	V <sub>RRM</sub>	25	V
Forward current (Average) *1	$I_{F(AV)}$	700	mA
Non-repetitive peak forward surge current *2	I <sub>FSM</sub>	2	A
Junction temperature	$T_{j}$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

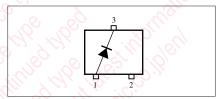
Note) \*1: Mounted on an alumina PC board

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



Marking Symbol: M5E

#### Internal Connection



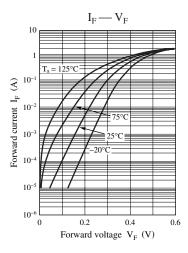
### ■ Electrical Characteristics T<sub>a</sub> = 25°C ± 3°C

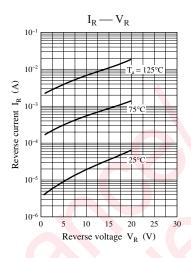
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	$I_F = 700 \text{ mA}$	150		0.45	V
Reverse current	$I_R$	V <sub>R</sub> = 20 V			200	μΑ
Terminal capacitance	C <sub>t</sub>	$V_R = 0 \text{ V, } f = 1 \text{ MHz}$		100		pF
Reverse recovery time	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		7		ns
		$I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$				

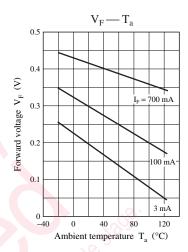
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

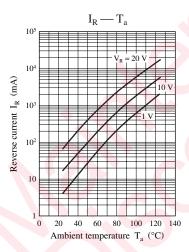
- This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
- 3. Absolute frequency of input and output is 250 MHz.

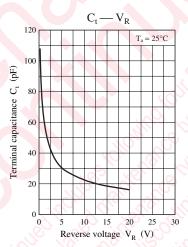
## **Panasonic**











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