## **MA3ZD120G**

## Silicon epitaxial planar type

For high speed switching

#### ■ Features

• Forward current (Average)  $I_{F(AV)} = 700 \text{ mA}$  rectification is possible

 $\bullet$  Low forward voltage:  $V_F < 0.45 \text{ V}$ 

• High-density mounting is possible

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

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 <sub>F(AV)</sub>	700	mA
Non-repetitive peak forward surge current *2	$I_{FSM}$	2	A
Junction temperature	$T_{j}$	125	°C
Storage temperature	T <sub>stg</sub>	-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)

#### Package

- Code
- SMini3-F2
- Pin Name
  - 1: Anode
  - 2: N.C.3: Cathode
- Marking Symbol: M5E

#### Internal Connection

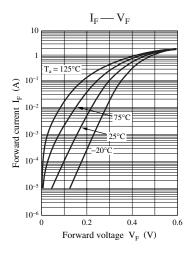


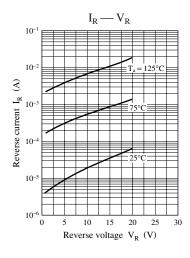
#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

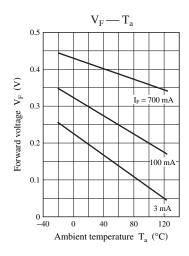
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	$I_F = 700 \text{ mA}$	0,0,		0.45	V
Reverse current	$I_R$	$V_R = 20 \text{ V}$			200	μΑ
Terminal capacitance	$C_{t}$	$V_R = 0 V, f = 1 MHz$		100		pF
Reverse recovery time	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		7		ns
		$I_{rr}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

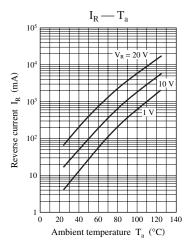
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

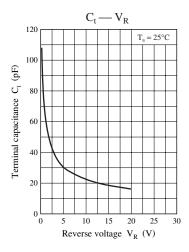
- 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
- 3. Absolute frequency of input and output is 250 MHz.

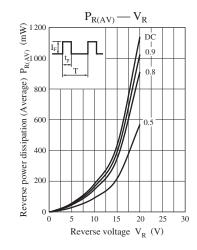


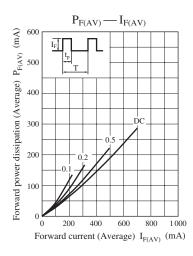


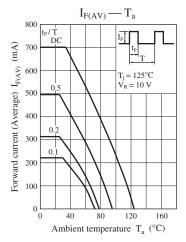






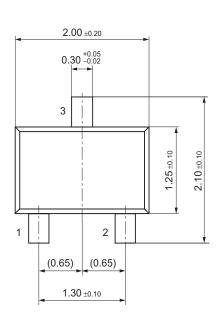


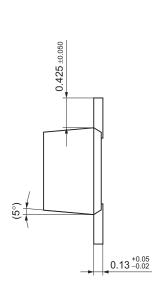


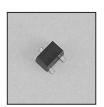


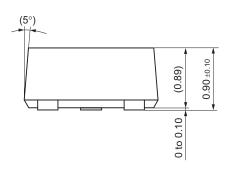
2 SKH00218AED

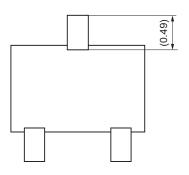
SMini3-F2 Unit: mm











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