# **MA3Z792** (MA792)

### Silicon epitaxial planar type

For super high speed switching For small current rectification

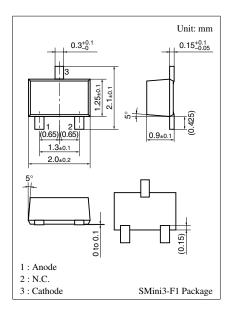
#### ■ Features

- High-density mounting is possible
- $I_{F(AV)} = 100$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time (t<sub>rr</sub>)
- Low forward voltage V<sub>F</sub> and good rectification efficiency
- S-Mini type 3-pin package

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

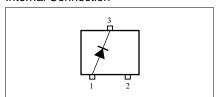
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	30	V
Repetitive peak reverse-voltage	$V_{RRM}$	30	V
Peak forward current	$I_{FM}$	300	mA
Average forward current	I <sub>F(AV)</sub>	100	mA
Non-repetitive peak forward- surge-current *	I <sub>FSM</sub>	1	A
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

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



#### Marking Symbol: M3T

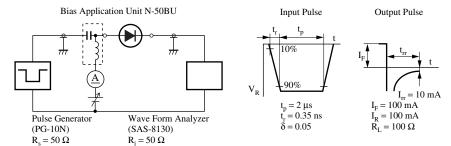
#### Internal Connection



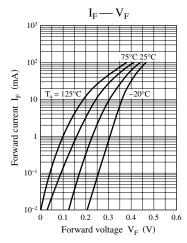
#### ■ Electrical Characteristics $T_a = 25$ °C

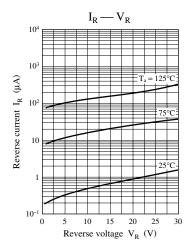
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			15	μΑ
Forward voltage (DC)	V <sub>F</sub>	$I_F = 100 \text{ mA}$			0.55	V
Terminal capacitance	C <sub>t</sub>	$V_R = 0 \text{ V, } f = 1 \text{ MHz}$		20		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		2.0		ns
		$I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$				

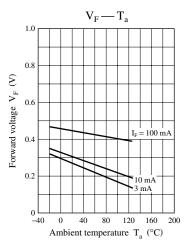
- Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
  - 2. Rated input/output frequency: 250 MHz 3. \*: t<sub>rr</sub> measuring instrument

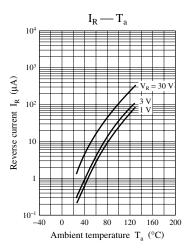


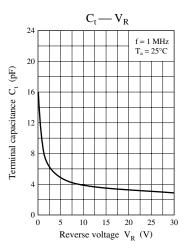
Note) The part number in the parenthesis shows conventional part number.











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