# MA3Z793 (MA793)

## Silicon epitaxial planar type

For super high speed switching For small current rectification

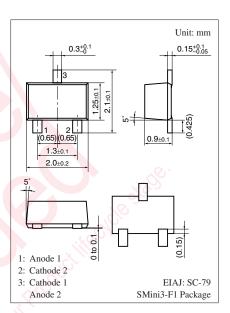
#### ■ Features

- Two MA3Z792 (MA792) is contained in one package (series connection)
- $I_{F(AV)} = 100$  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

### ■ Absolute Maximum Ratings T<sub>a</sub> = 25°C

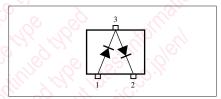
Parameter		Symbol	Rating	Unit
Reverse voltage		$V_R$	30	V
Repetitive peak reverse voltage		V <sub>RRM</sub>	30	V
Forward current	Single	$I_{\mathrm{F}}$	100	mA
	Series		70	
Peak forward	Single	$I_{FM}$	300	mA
current	Series		200	1101
Non-repetitive peak forward		I <sub>FSM</sub>	1	A
surge current *				762 YG
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: M4A

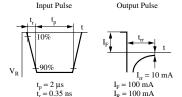
#### Internal Connection



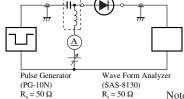
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

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



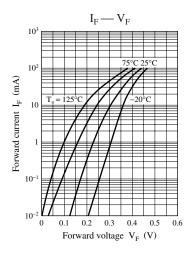
4. \*: t<sub>rr</sub> measurement circuit

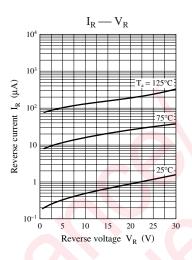


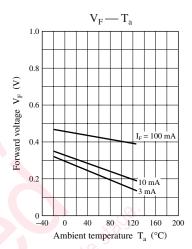
Bias Application Unit (N-50BU)

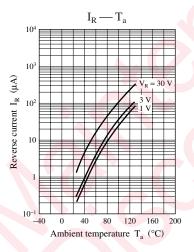
 $\hat{\delta} = 0.05$   $\hat{R}_L = 100 \, \Omega$ Note) The part number in the parenthesis shows conventional part number.

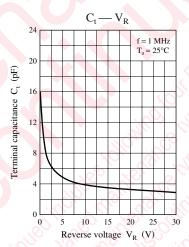
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