

# MA3Z792D (MA792WA), MA3Z792E (MA792WK)

Silicon epitaxial planar type

For super high speed switching

For small current rectification

**■ Features**

- Two MA3Z792 (MA792) is contained in one package
- Forward current (Average)  $I_{F(AV)} = 100$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time  $t_{rr}$
- Low forward voltage  $V_F$  and good rectification efficiency

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Forward current	Single	$I_F$	100
	Double *1		70
Peak forward current	Single	$I_{FM}$	300
	Double *1		200
Non-repetitive peak forward surge current *2	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

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

**■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$**

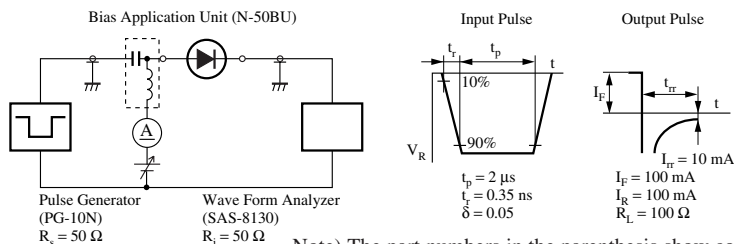
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100$ mA			0.55	V
Reverse current	$I_R$	$V_R = 30$ V			15	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 0$ V, $f = 1$ MHz		20		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ $\Omega$		2		ns

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

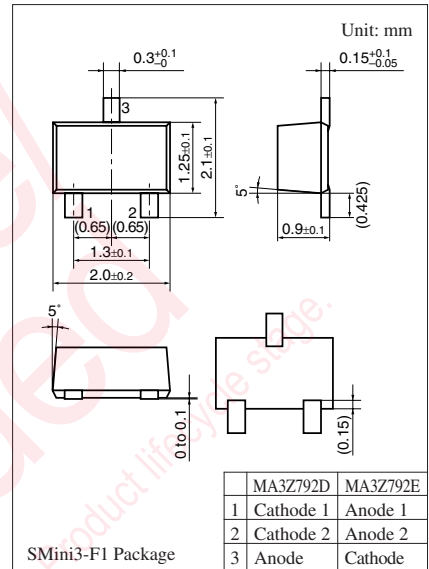
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 250 MHz.

4.\*:  $t_{rr}$  measurement circuit



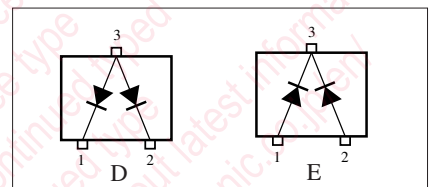
Note) The part numbers in the parenthesis show conventional part number.

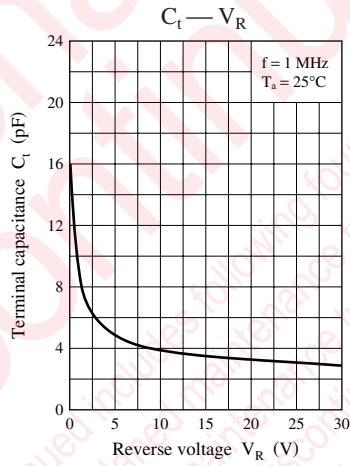
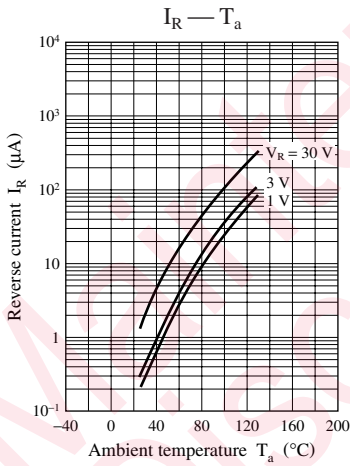
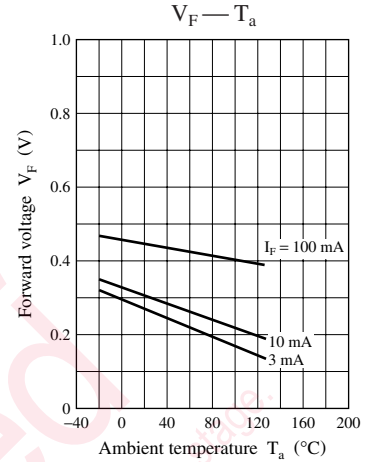
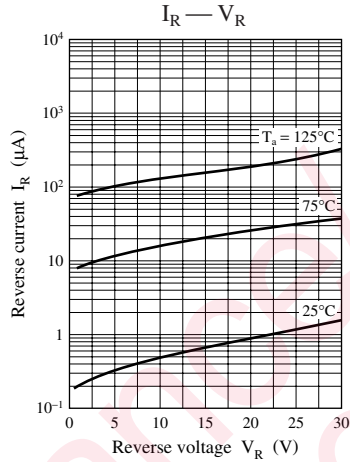
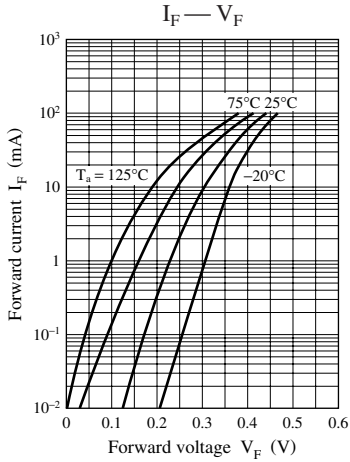


**Marking Symbol**

- MA3Z792D: M3Y
- MA3Z792E: M3Z

**Internal Connection**





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