

# MA4X193 (MA193)

## Silicon epitaxial planar type

For switching circuit

### ■ Features

- Four isolated elements contained in one package
- Short reverse recovery time  $t_{rr}$
- Bridge diodes for surface mounting
- Anode common + cathode common composite product

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	80	V
Repetitive peak reverse voltage	$V_{RRM}$	80	V
Forward current (Average)	$I_{F(AV)}$	70	mA
Repetitive peak forward current	$I_{FRM}$	150	mA
Non-repetitive peak forward surge current *	$I_{FSM}$	250	mA
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{sig}$	-55 to +150	$^\circ\text{C}$

Note) \*:  $t = 1 \text{ s}$

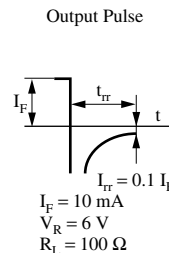
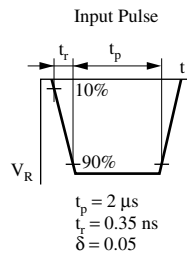
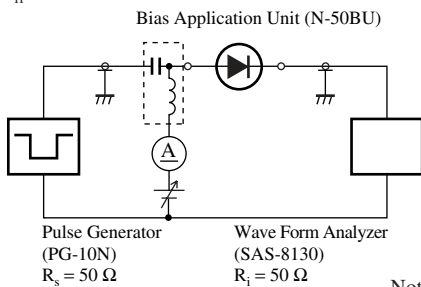
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 70 \text{ mA}$			1.2	V
Reverse voltage	$V_R$	$I_R = 100 \mu\text{A}$	80			V
Reverse current	$I_R$	$V_R = 75 \text{ V}$			100	nA
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			15	pF
Reverse recovery time *	$t_{rr}$	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100 \Omega$			10	ns

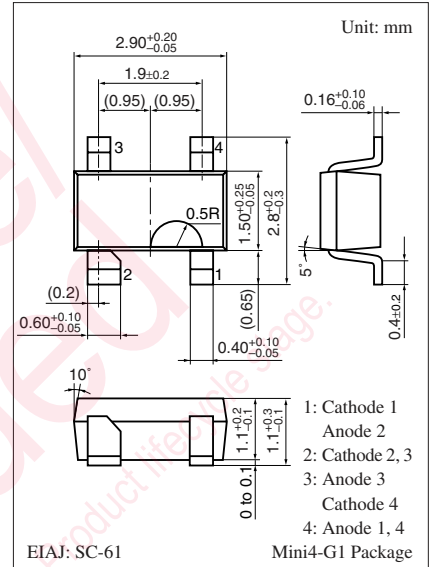
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 100 MHz.

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

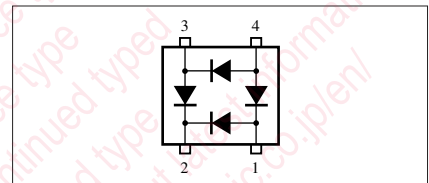


Note) The part number in the parenthesis shows conventional part number.

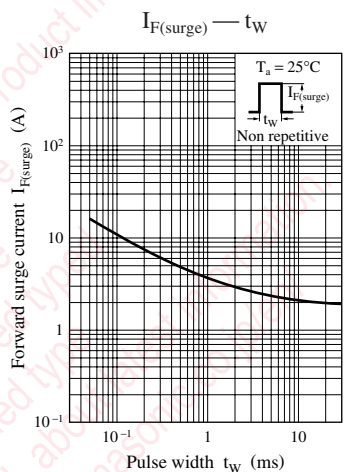
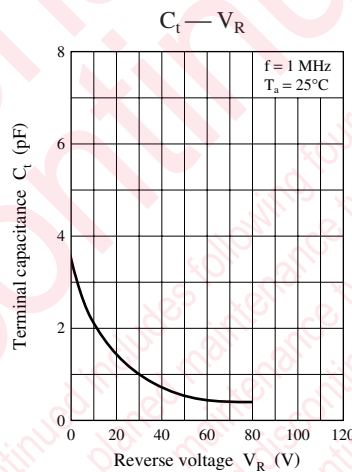
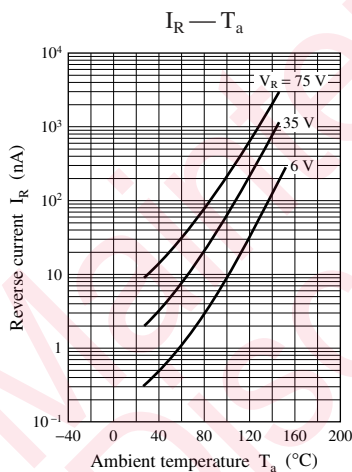
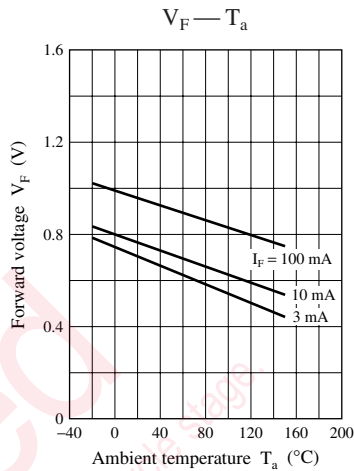
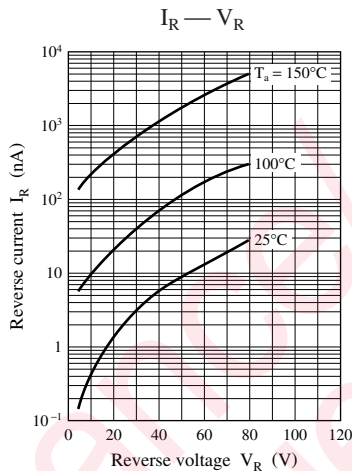
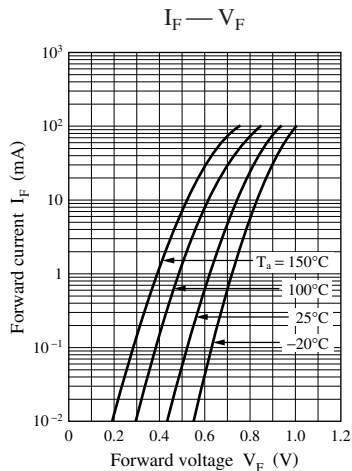


Marking Symbol: M2Z

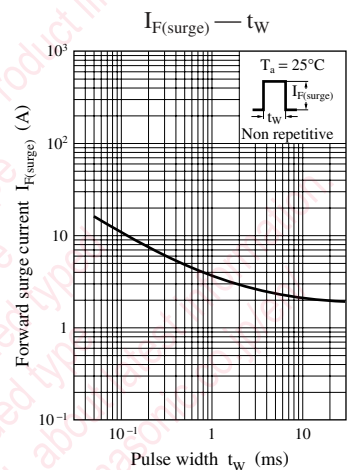
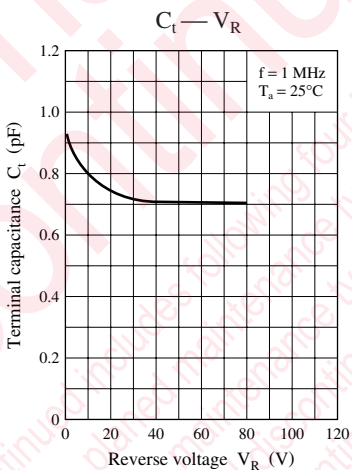
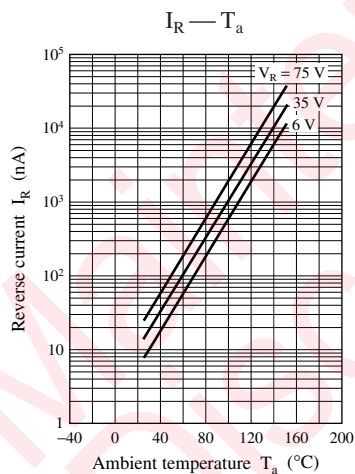
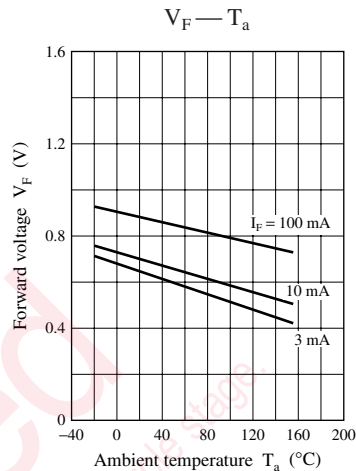
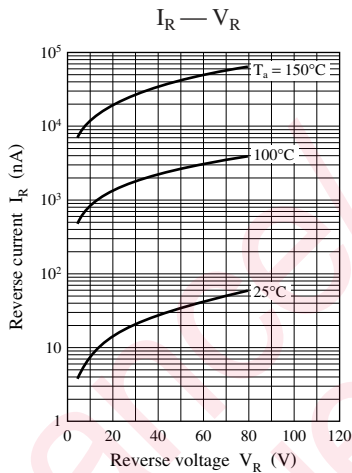
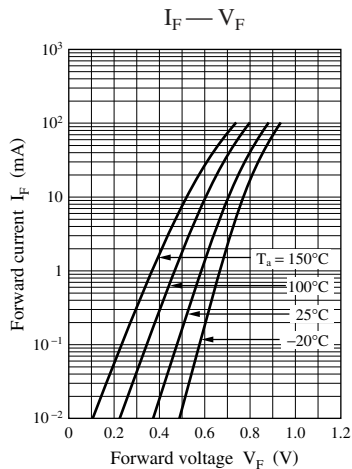
Internal Connection



4-1 and 4-3 pins (anode common) characteristics charts



1-2 and 3-2 pins (cathode common) characteristics charts



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