

# MA4X160 (MA160)

## Silicon epitaxial planar type

For high-speed switching circuits

### ■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- Centrosymmetrical wiring, allowing to free from the taping direction
- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance  $C_t$

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

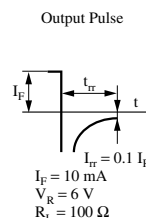
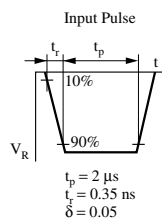
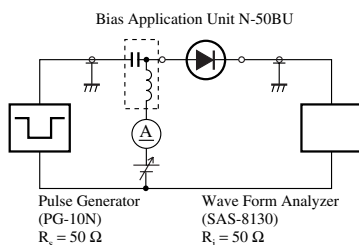
Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	40	V
Maximum peak reverse voltage	$V_{RM}$	40	V
Forward current (Average)	Single	$I_{F(AV)}$	100
	Series		75
Repetitive peak forward current	Single	$I_{FRM}$	225
	Series		170
Non-repetitive peak forward surge current *	Single	$I_{FSM}$	500
	Series		375
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

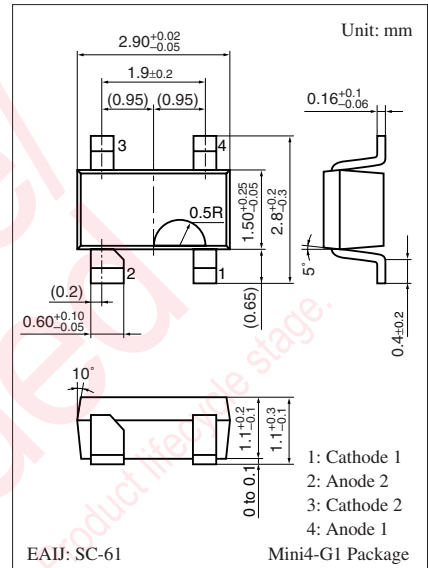
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$		0.95	1.20	V
Reverse voltage	$V_R$	$I_R = 100 \mu\text{A}$	40			V
Reverse current	$I_R$	$V_R = 35 \text{ V}$			0.1	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		0.9	2.0	pF
Reverse recovery time *	$t_{rr}$	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{tr} = 0.1 I_R, R_L = 100 \Omega$			3	ns

- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.  
 2. Absolute frequency of input and output is 100 MHz.  
 3. \*:  $t_{rr}$  measurement circuit

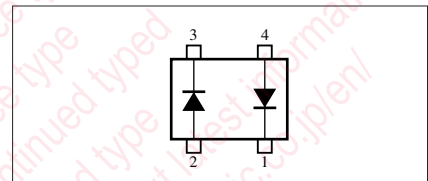


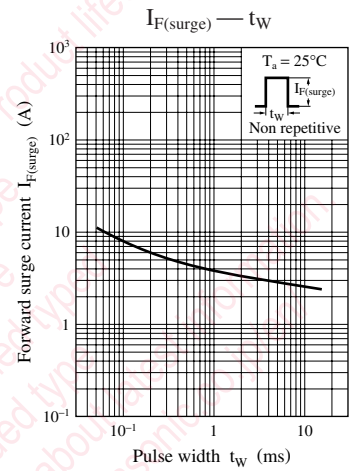
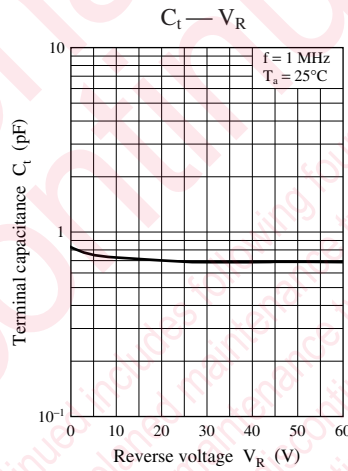
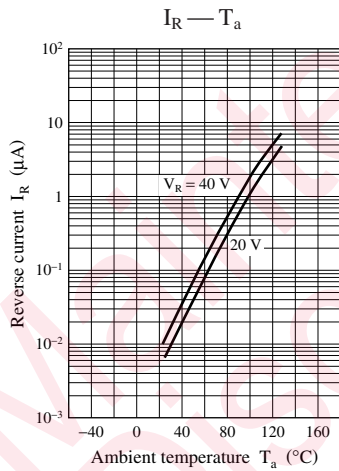
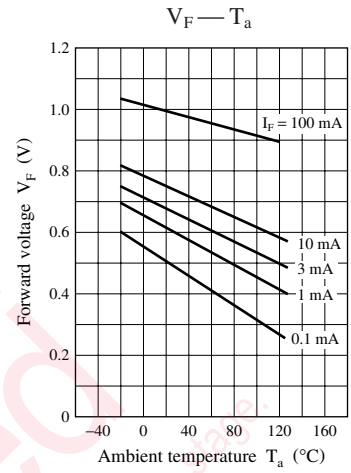
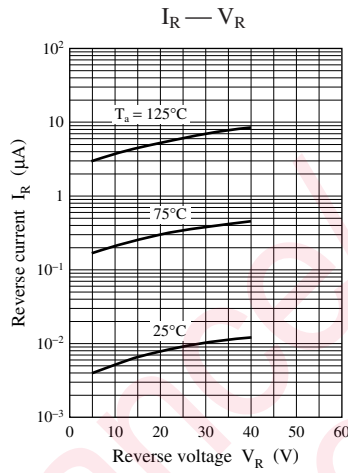
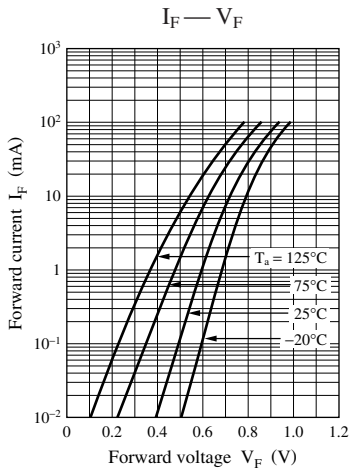
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1D

Internal Connection





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