

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 75
	Double		
Repetitive peak forward current	Single	I_{FRM}	225 170
	Double		
Non-repetitive peak forward surge current *	Single	I_{FSM}	500 375
	Double		
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

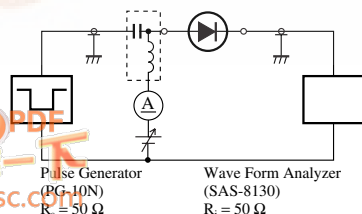
Note) *: $t = 1 \text{ s}$

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

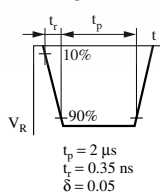
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100 \text{ mA}$		0.95	1.20	V
Reverse voltage	V_R	$I_R = 100 \mu\text{A}$	40			V
Reverse current	I_R	$V_R = 35 \text{ V}$			0.1	μA
Terminal capacitance	C_t	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		0.9	2.0	pF
Reverse recovery time *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

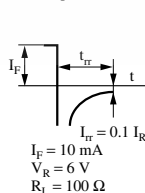
Bias Application Unit N-50BU



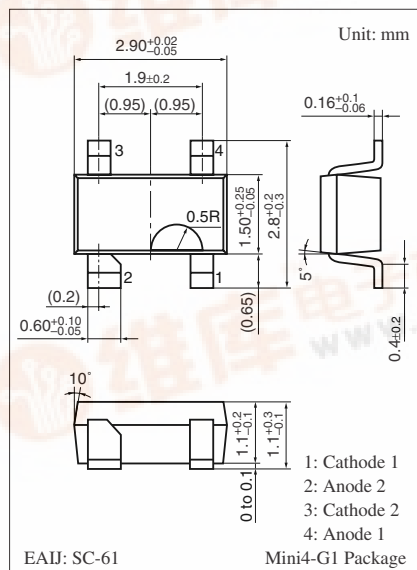
Input Pulse



Output Pulse

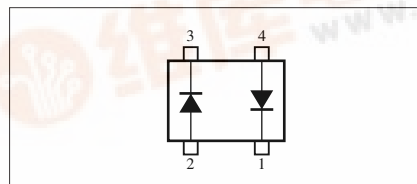


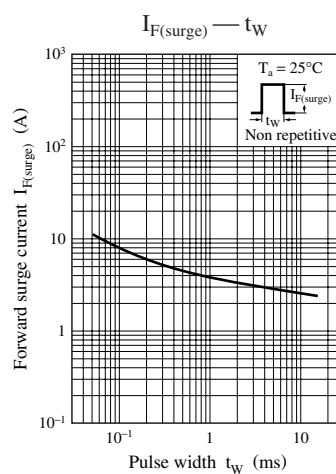
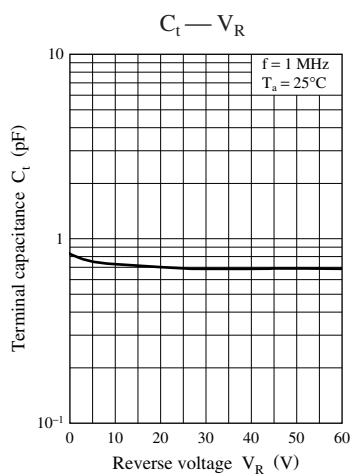
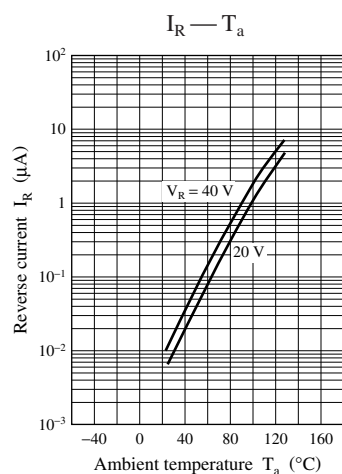
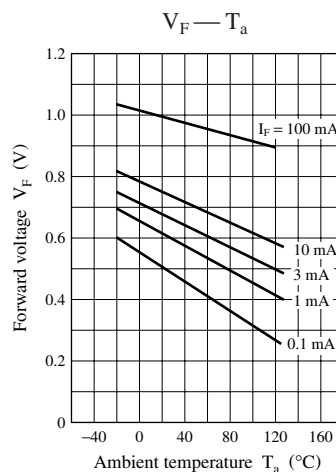
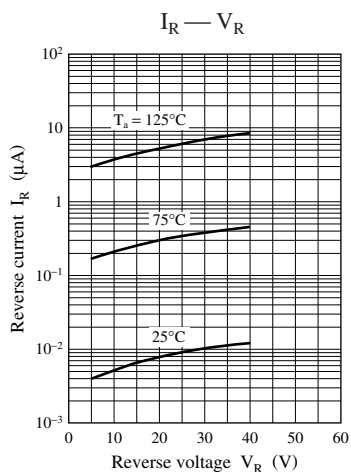
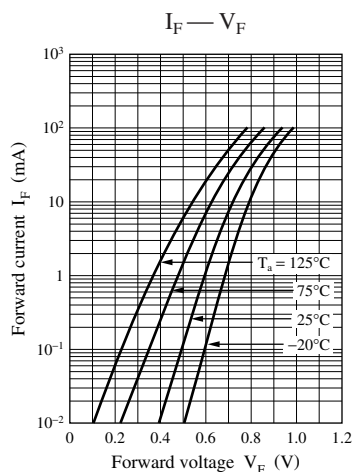
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1D

Internal Connection





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