

# MA4X159A (MA159A)

## Silicon epitaxial planar type

For switching circuits

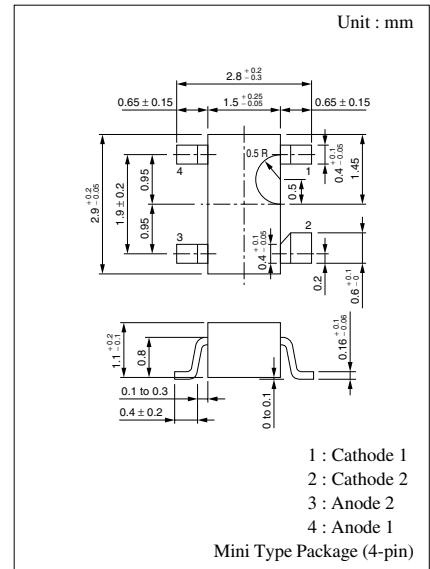
### ■ Features

- Two isolated elements contained in one package, allowing high-density mounting
- Short reverse recovery time  $t_{rr}$
- Small terminal capacitance,  $C_t$

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

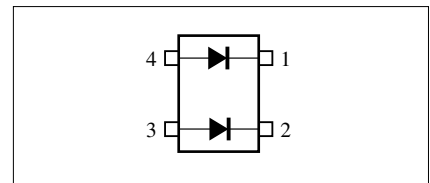
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	80	V
Repetitive peak reverse voltage	$V_{RRM}$	80	V
Average forward current	Single	$I_{F(AV)}$	100 mA
	Double	$I_{F(AV)}$	75 mA/Unit
Repetitive peak forward current	Single	$I_{FRM}$	225 mA
	Double	$I_{FRM}$	170 mA/Unit
Non-repetitive peak forward surge current*	Single	$I_{FSM}$	500 mA
	Double	$I_{FSM}$	375 mA/Unit
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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



Marking Symbol: M1B

Internal Connection

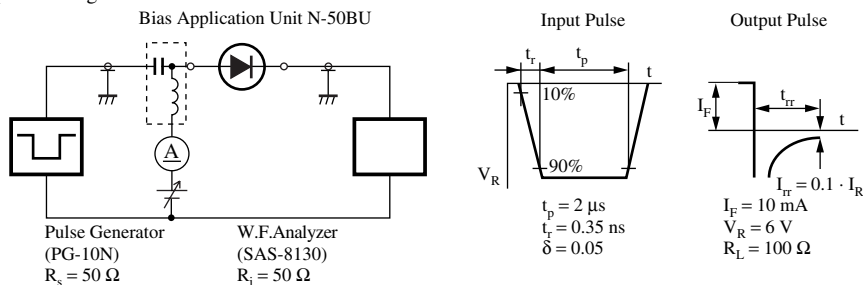


### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

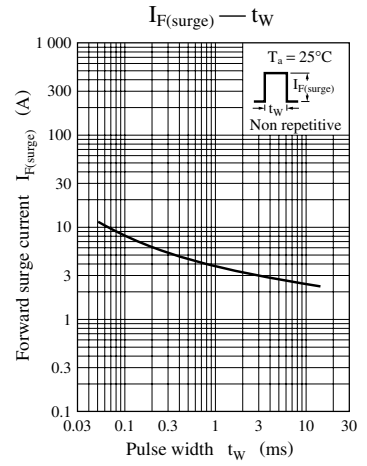
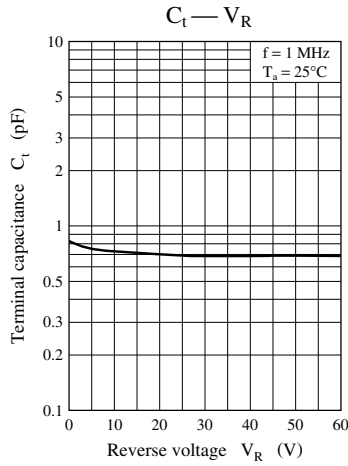
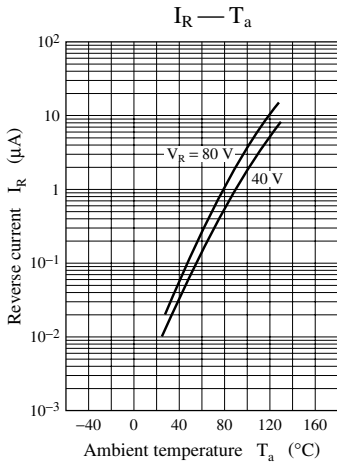
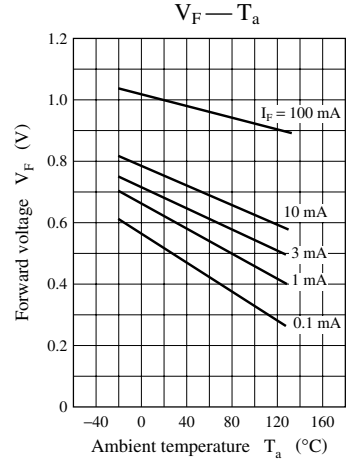
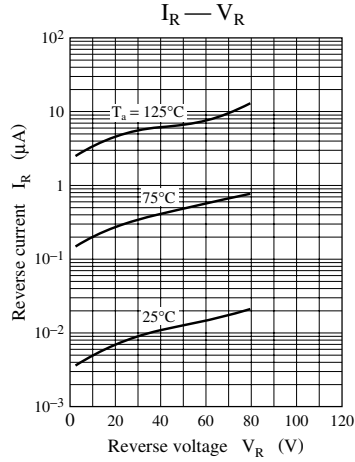
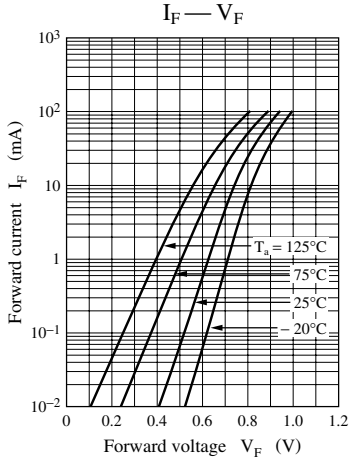
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 75 \text{ V}$			0.1	$\mu\text{A}$
Forward voltage (DC)	$V_F$	$I_F = 100 \text{ mA}$		0.95	1.2	V
Reverse voltage (DC)	$V_R$	$I_R = 100 \mu\text{A}$	80			V
Terminal capacitance	$C_t$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		0.9	2	pF
Reverse recovery time*	$t_{rr}$	$I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{tr} = 0.1 \cdot I_R, R_L = 100 \Omega$			3	ns

Note) 1. Rated input/output frequency: 100 MHz

2. \* :  $t_{rr}$  measuring circuit



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



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