

# 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		$V_R$	80	V
Maximum peak reverse voltage		$V_{RM}$	80	V
Forward current	Single	$I_F$	100	mA
	Double		75	
Peak forward current	Single	$I_{FM}$	225	mA
	Double		170	
Non-repetitive peak forward surge current *	Single	$I_{FSM}$	500	mA
	Double		375	
Junction temperature		$T_j$	150	$^\circ\text{C}$
Storage temperature		$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

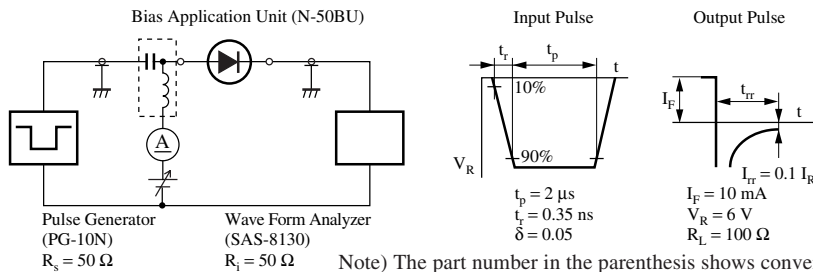
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 100\text{ mA}$		0.95	1.20	V
Reverse voltage	$V_R$	$I_R = 100\ \mu\text{A}$	80			V
Reverse current	$I_R$	$V_R = 75\text{ V}$			100	nA
Terminal capacitance	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$		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

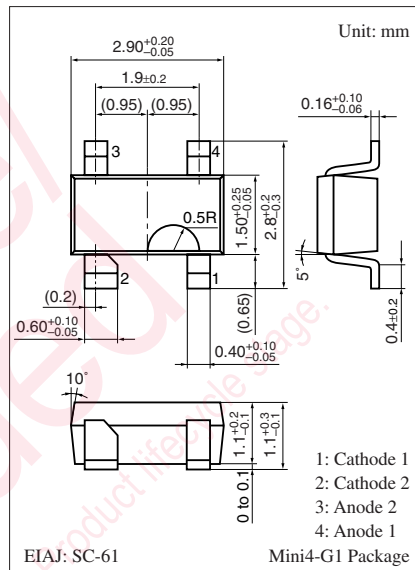
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

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

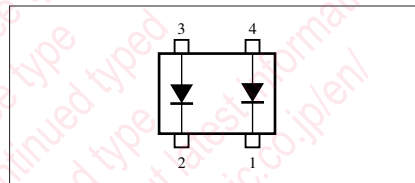


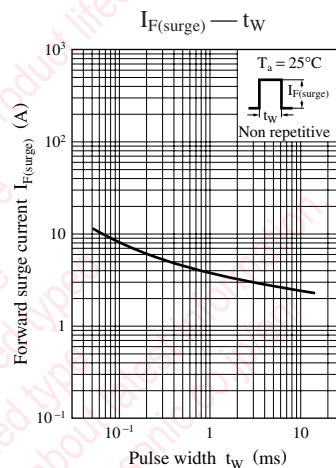
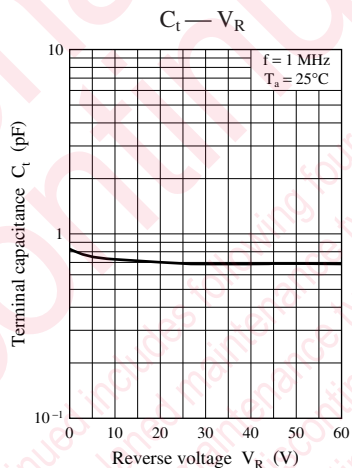
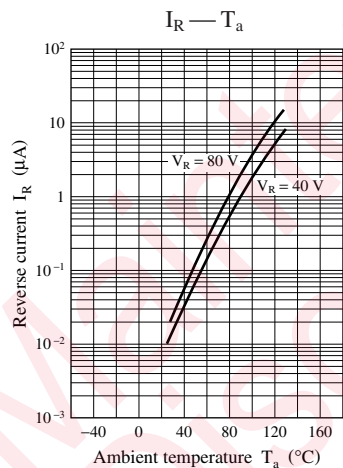
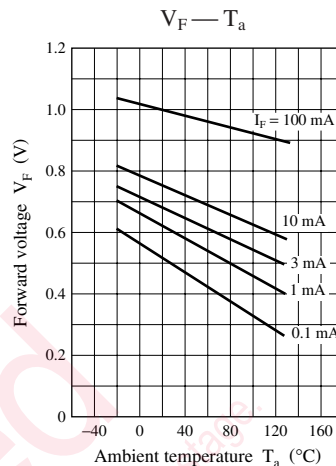
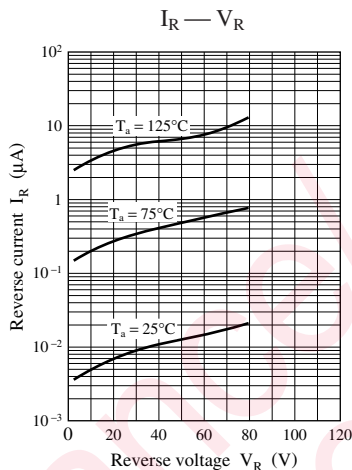
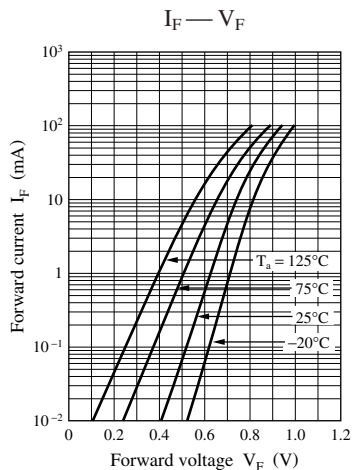
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1B

Internal Connection





## utions in using the technical information and scribed in this book

s book is to be exported or provided to non-residents, the laws and  
rd to security export control, must be observed.

ly to show the main characteristics and application circuit examples  
l property right or other right owned by our company or any other  
any as to the infringement upon any such right owned by any other  
rmation described in this book.

standard applications or general electronic equipment (such as office  
and household appliances).

ng applications:

biles, traffic control equipment, combustion equipment, life support  
reliability are required, or if the failure or malfunction of the prod-

ck are subject to change without notice for modification and/or im-  
use of the products, therefore, ask for the most up-to-date Product  
atisfy your requirements.

bsolute maximum rating and the guaranteed operating conditions  
(.). Especially, please be careful not to exceed the range of absolute  
er-off and mode-switching. Otherwise, we will not be liable for any

take into the consideration of incidence of break down and failure  
n the systems such as redundant design, arresting the spread of fire  
al injury, fire, social damages, for example, by using the products.

own and characteristics change due to external factors (ESD, EOS,  
mounting or at customer's process. When using products for which  
shelf life and the elapsed time since first opening the packages.

ly or partially, without the prior written permission of Matsushita

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View MA4X159A0L on WIN SOURCE](#)

 [Panasonic Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management