

MA159, MA159A

Silicon Epitaxial Planar Type

Switching

Features

- High density mounting by built-in 2 independent elements is possible.
- Fast t_{rr}
- Small C_t

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Reverse Voltage (DC)	MA159	40	V
	MA159A	80	
Repetitive Peak Reverse Voltage	MA159	40	V
	MA159A	80	
Average Forward Current (DC)	Single	100	mA/Unit
	Double	75	
Repetitive Peak Forward Current	Single	225	mA/Unit
	Double	170	
Non-Repetitive Peak Forward Surge Current	Single	500	mA/Unit
	Double	375	
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

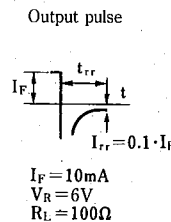
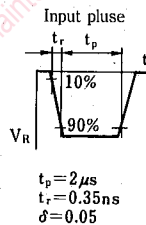
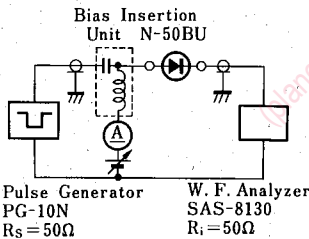
* $t=1s$

Electrical Characteristics ($T_a=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Reverse Current (DC)	MA159	$V_R=35V$			0.1	μA
	MA159A	$V_R=75V$			0.1	
Forward Voltage (DC)	V_F	$I_F=100\text{mA}$		0.95	1.2	V
Reverse Voltage (DC)	MA159	$I_R=100\mu\text{A}$	40			V
	MA159A		80			
Terminal Capacitance	C_t	$V_R=0, f=1\text{MHz}$		0.9	2	pF
Reverse Recovery Time	t_{rr}^*	$I_F=10\text{mA}, V_R=6V, R_L=100\Omega$ $I_{rr}=0.1 \cdot I_R$			3	ns

* t_{rr} measuring circuit

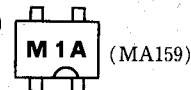
© Input and output frequency of ratings: 100MHz



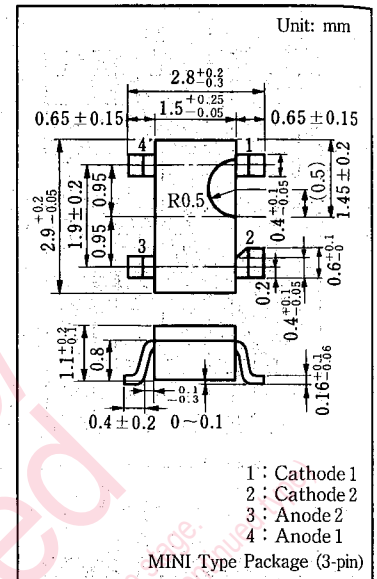
Marking Symbol

Type No.	MA159	MA159A
Symbol	M1A	M1B

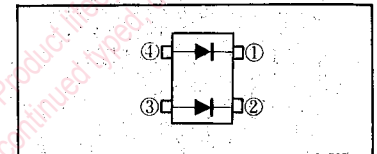
Marking Symbol (Ex.)

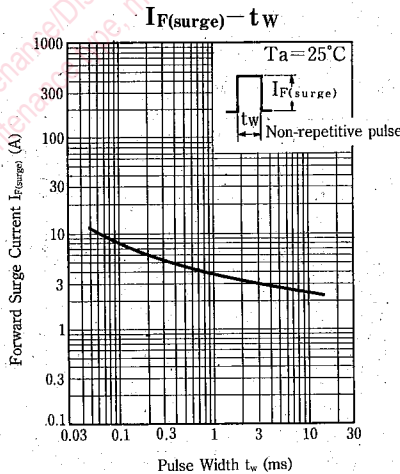
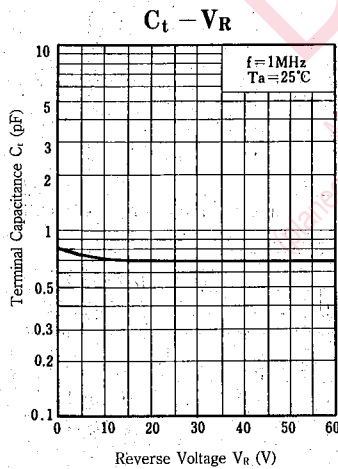
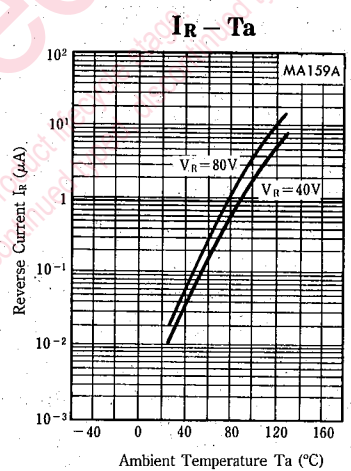
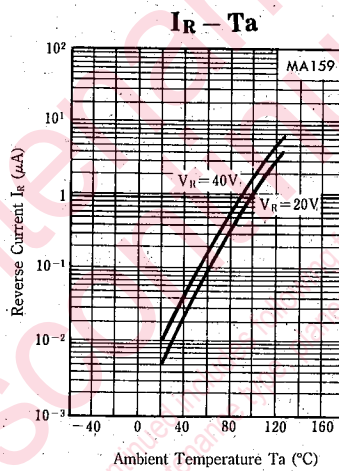
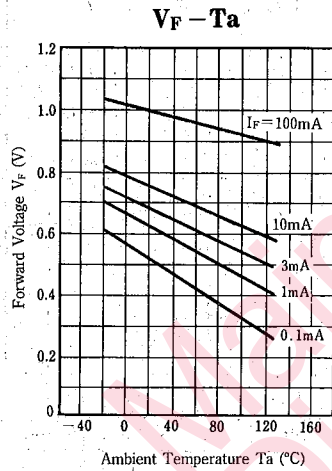
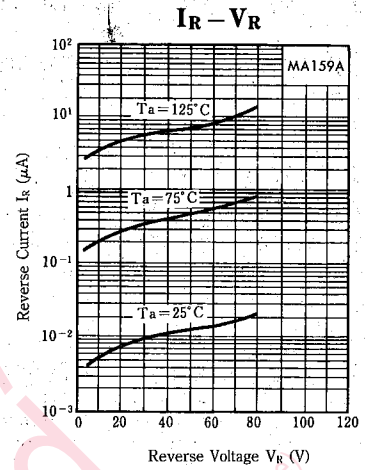
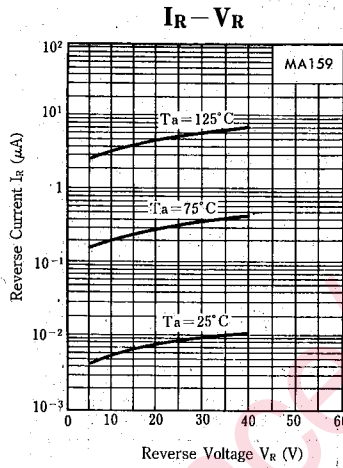
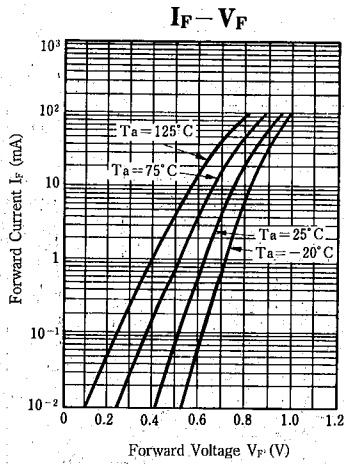


Package Dimensions



Inner Circuit





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