

MA151WK, MA152WK

Silicon Epitaxial Planar Type

Switching

■ Features

- Fast t_{rr}
- Small C_t

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

Item	Symbol	Value	Unit
Reverse Voltage (DC)	MA151WK	40	V
	MA152WK	80	
Peak Reverse Voltage	MA151WK	40	V
	MA152WK	80	
Forward Current (DC)	Single	100	mA
	Double	150	
Peak Forward Current	Single	225	mA
	Double	340	
Non-Repetitive Peak Forward Surge Current	Single	500	mA
	Double	750	
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

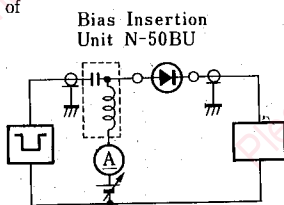
* $t=1\text{s}$

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

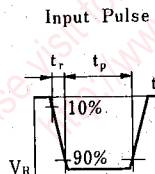
Item	Symbol	Condition	min.	typ.	max.	Unit
Reverse Current (DC)	MA151WK	$V_R=35\text{V}$			0.1	μA
	MA152WK	$V_R=75\text{V}$			0.1	
Forward Voltage (DC)	V_F	$I_F=100\text{mA}$			1.2	V
Reverse Voltage (DC)	MA151WK	$I_R=100\mu\text{A}$	40			V
	MA152WK		80			
Terminal Capacitance	C_t	$V_R=0, f=1\text{MHz}$			2	pF
Reverse Recovery Time	t_{rr}^*	$I_F=10\text{mA}, V_R=6\text{V}, R_L=100\Omega$ $I_{rr}=0.1 \cdot I_R$			3	ns

◎ Input and output frequency of ratings: 100MHz

* t_{rr} measuring circuit

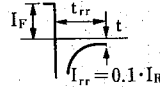


Pulse Generator PG-10N $R_S=50\Omega$
W. F. Analyzer SAS-8130 $R_i=50\Omega$



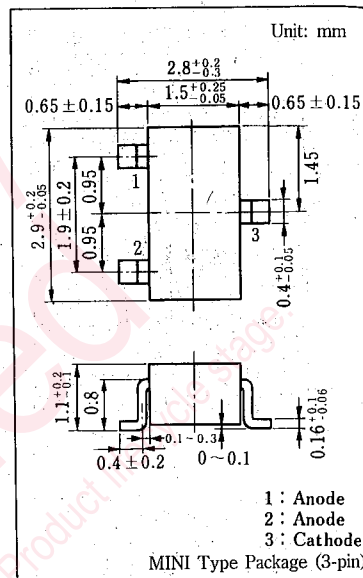
$t_p=2\mu\text{s}$
 $t_r=0.35\text{ns}$
 $\delta=0.05$

Output Pulse



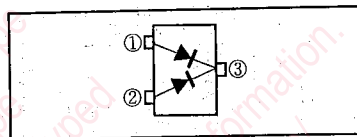
$I_F=10\text{mA}$
 $V_R=6\text{V}$
 $R_L=100\Omega$

■ Package Dimensions



1 : Anode
2 : Anode
3 : Cathode
MINI Type Package (3-pin)

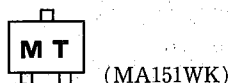
■ Inner Circuit

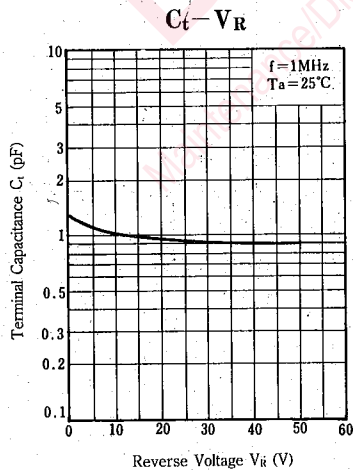
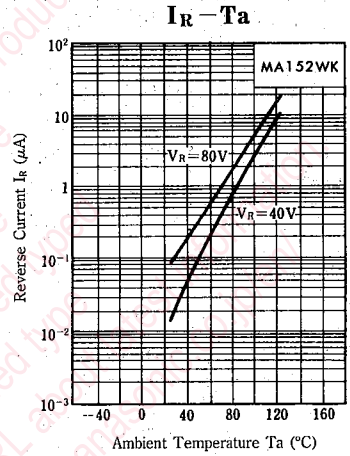
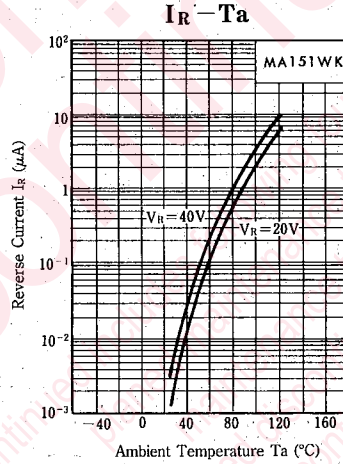
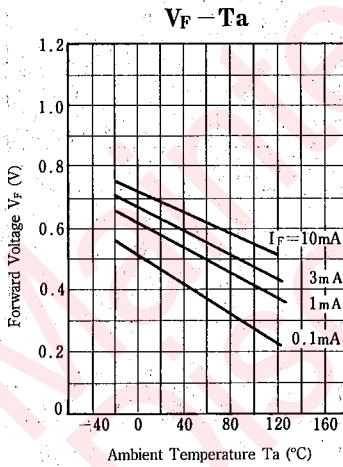
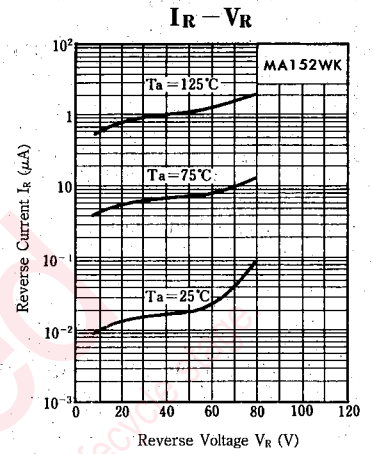
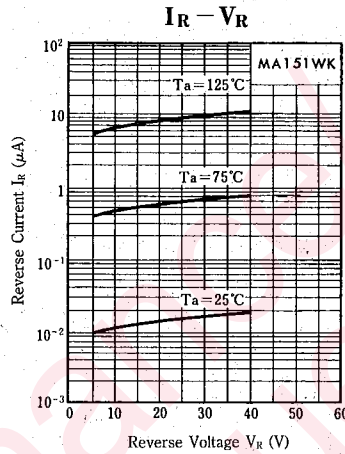
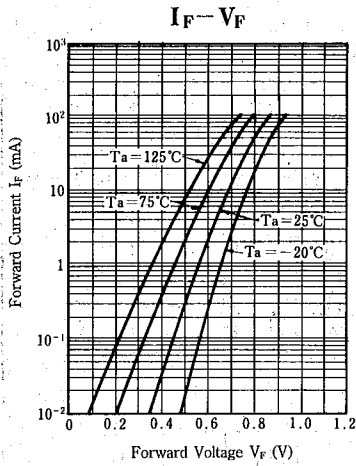


■ Marking Symbol

Type No.	MA151WK	MA152WK
Symbol	MT	MU

■ Marking Symbol (Ex.)





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