

# MA141WK, MA142WK

## Silicon Epitaxial Planar Type

### Switching

#### ■ Features

- High density mounting by two elements built-in "Mini type" package is possible.
- Fast  $t_{rr}$
- Small  $C_i$

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

Item	Symbol	Value	Unit
Reverse Voltage (DC)	MA141WK	40	V
	MA142WK	80	
Peak Reverse Voltage	MA141WK	40	V
	MA142WK	80	
Forward Current (DC)	Double	150	mA
	Single	100	
Peak Forward Current	Double	340	mA
	Single	225	
Non-Repitative Peak Forward Surge Current	Double	750	mA
	Single	500	
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 ~ +150	$^\circ\text{C}$

\* $t=1s$

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

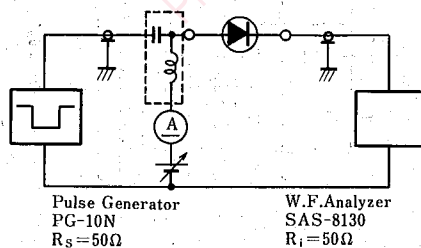
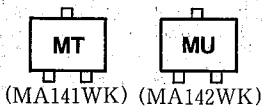
Item	Symbol	Condition	min.	typ.	max.	Unit
Reverse Current (DC)	MA141WK	$V_R=35V$			100	nA
	MA142WK	$V_R=75V$			100	
Forward Voltage (DC)	$V_F$	$I_F=100mA$			1.2	V
Reverse Voltage (DC)	MA141WK	$I_R=100\mu A$	40			V
	MA142WK		80			
Terminal Capacitance	$C_i$	$V_R=0, f=1MHz$			2	pF
Reverse Recovery Time	$t_{rr}^*$	$I_F=10mA, V_R=6V$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$			3	ns

© Input and output frequency of ratings: 100MHz

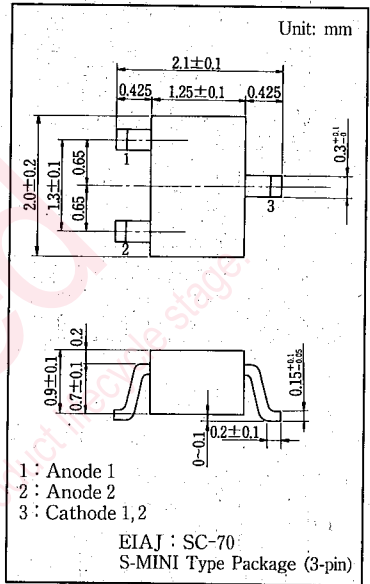
\* $t_{rr}$  measuring circuit

Bias Insertion Unit N-50BU

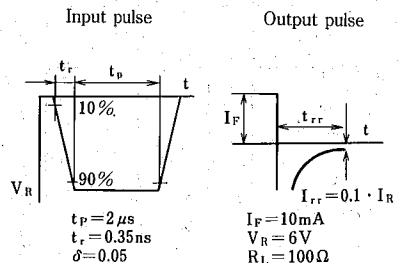
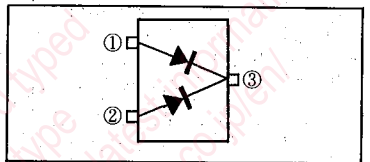
#### ■ Marking Symbol

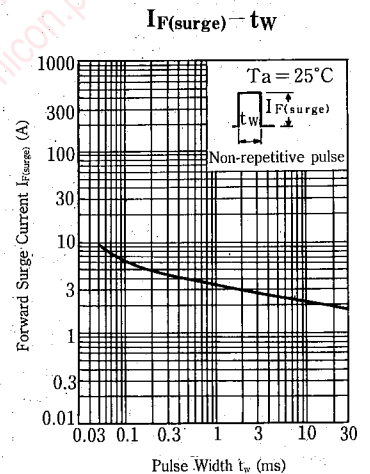
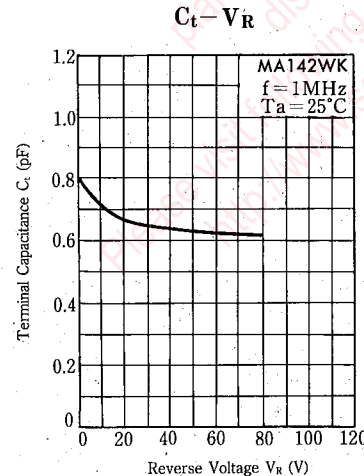
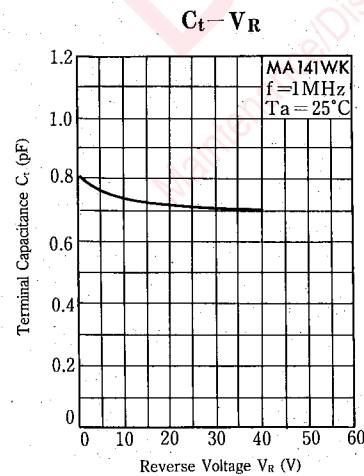
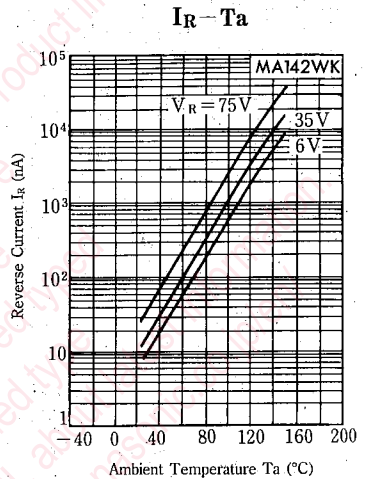
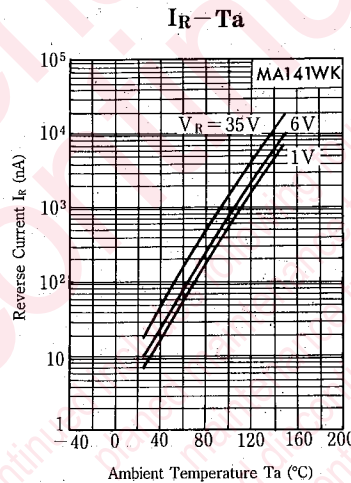
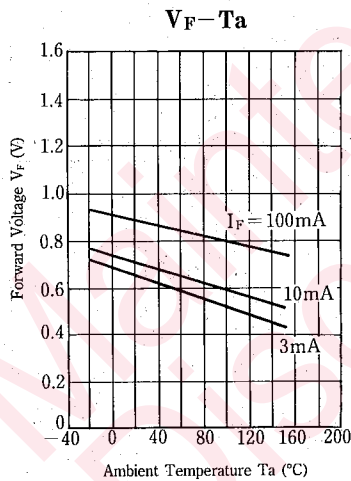
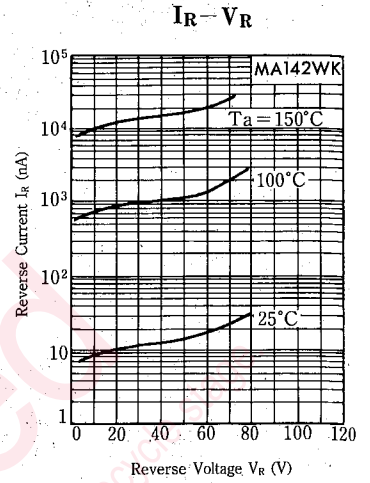
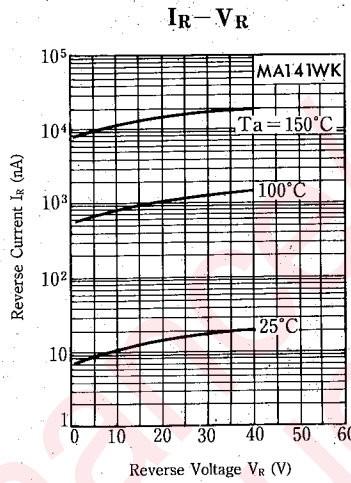
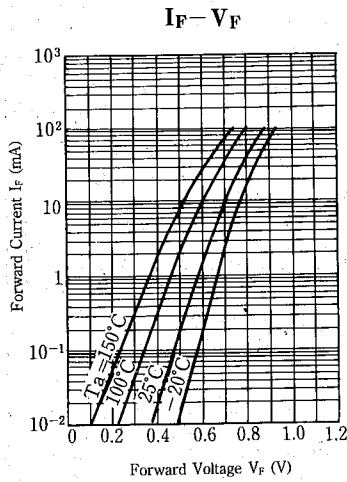


#### ■ Package Dimensions



#### ■ Inner Circuit





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