

MA141K, MA142K

Silicon Epitaxial Planar Type

Switching

Features

- High density mounting by "S-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)	MA141K	40	V
	MA142K	80	
Peak Reverse Voltage	MA141K	40	V
	MA142K	80	
Forward Current (DC)	I_F	100	mA
Peak Forward Current	I_{FM}	225	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}^*	500	mA
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

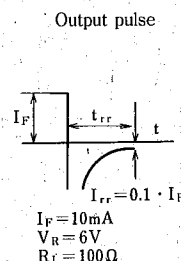
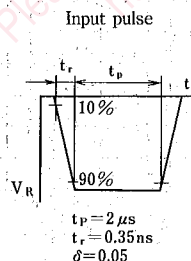
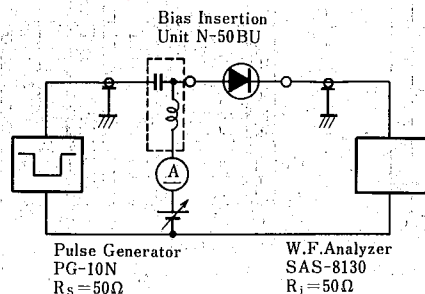
* $t=1s$

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

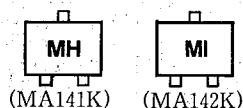
Item	System	Condition	min.	typ.	max.	Unit
Reverse Current (DC)	MA141K	$V_R=35V$			100	nA
	MA142K	$V_R=75V$			100	
Forward Voltage (DC)	V_F	$I_F=100mA$			1.2	V
Reverse Voltage (DC)	MA141K	$I_R=100\mu A$	40			V
	MA142K		80			
Terminal Capacitance	MA141K	$V_R=0, f=1MHz$		0.9	2	pF
	MA142K				2	
Reverse Recovery 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

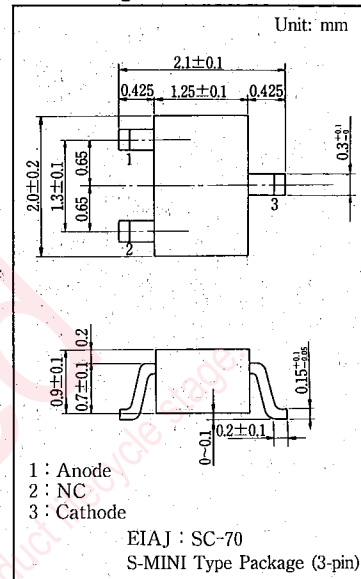
* t_{rr} measuring circuit



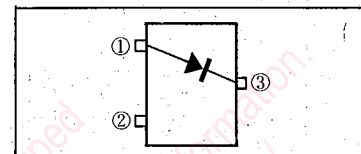
Marking Symbol

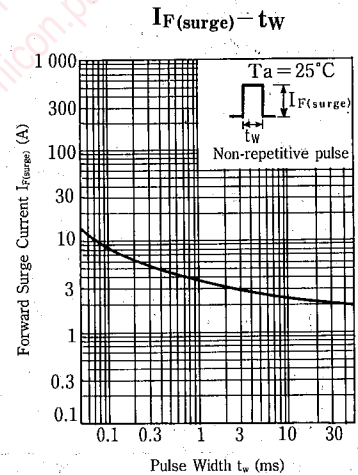
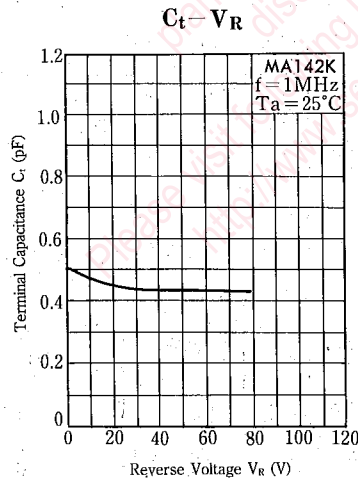
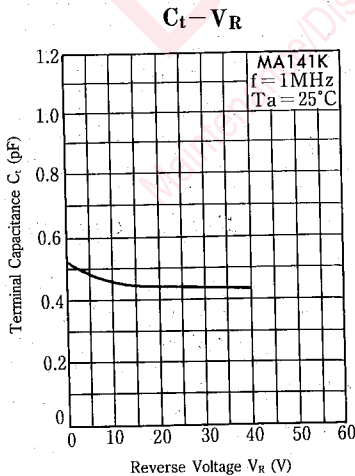
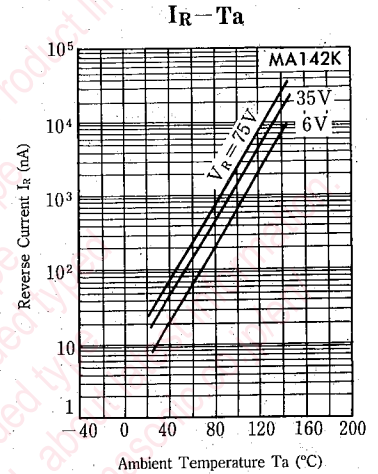
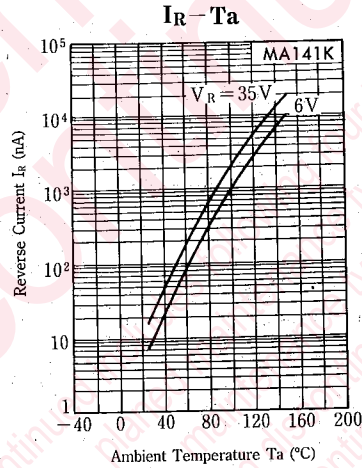
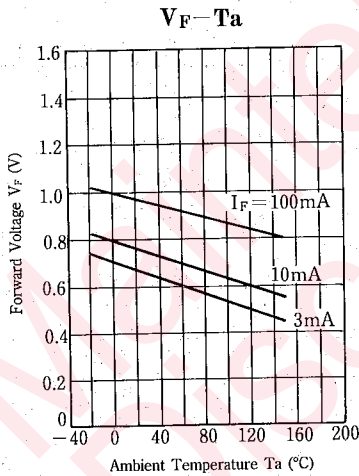
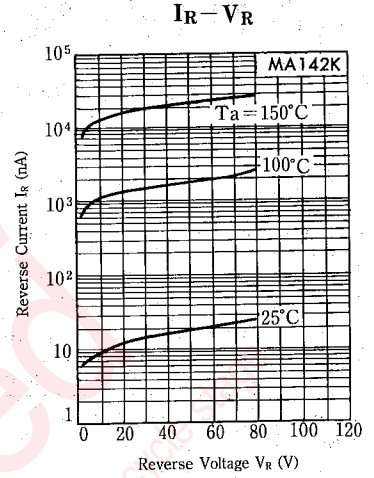
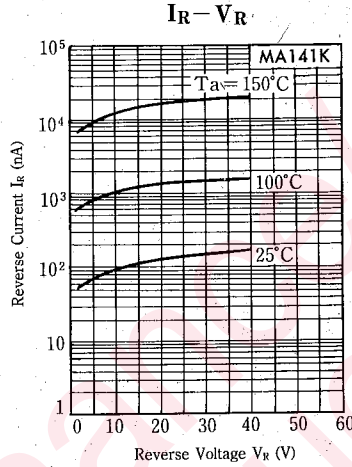
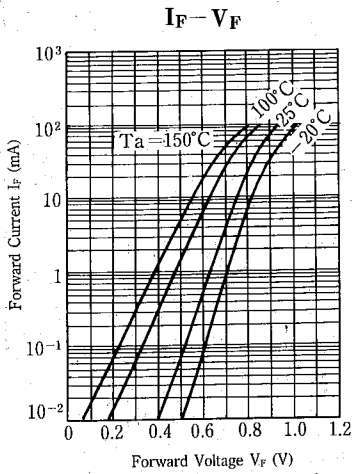


Package Dimensions



Inner Circuit





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