

MA142K

Silicon epitaxial planer type

For switching circuits

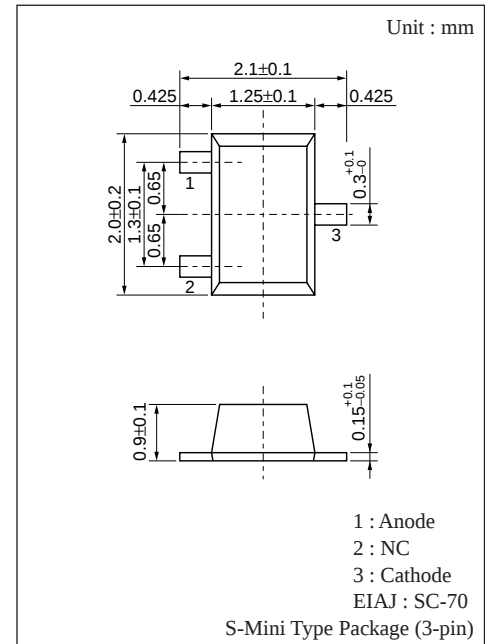
■ Features

- Small S-Mini type package enabling high density mounting
- Short reverse recovery period t_{rr}
- Small capacity between pins, C_t

■ Absolute Maximum Ratings (Ta= 25°C)

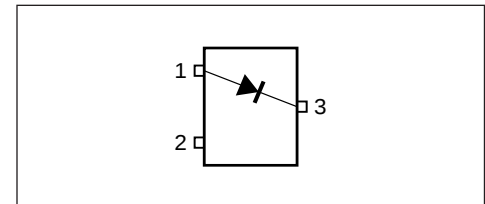
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	80	V
Peak reverse voltage	V_{RM}	80	V
Forward current (DC)	I_F	100	mA
Peak forward current	I_{FM}	225	mA
Non-repetitive peak forward surge current	I_{FSM}^*	500	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 to +150	°C

* $t=1s$



Marking Symbol : MI

■ Internal Connection

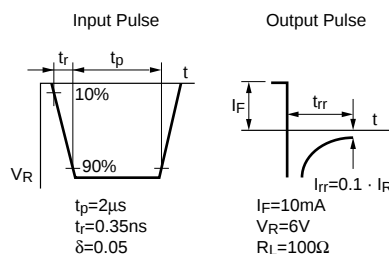
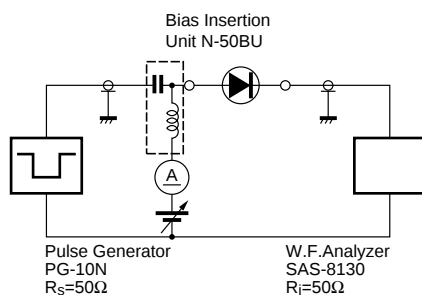


■ Electrical Characteristics (Ta= 25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R=75V$			100	nA
Forward voltage (DC)	V_F	$I_F=100mA$			1.2	V
Reverse voltage (DC)	V_R	$I_R=100\mu A$	80			V
Terminal capacitance	C_t	$V_R=0V, f=1MHz$			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

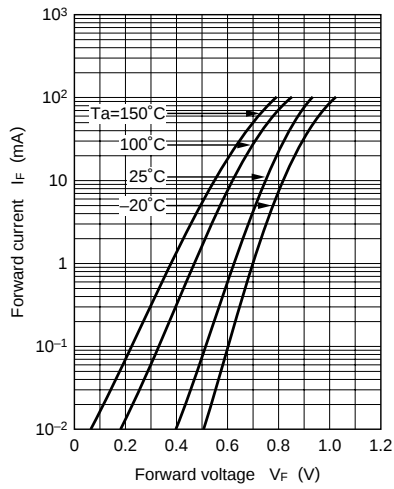
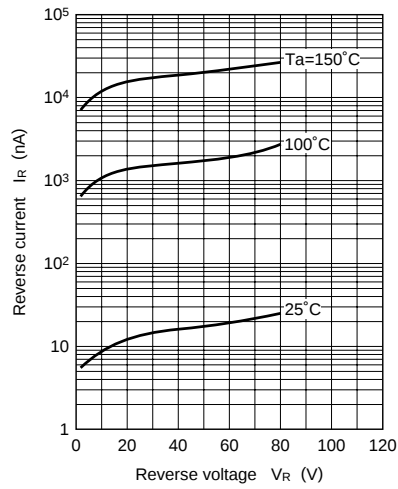
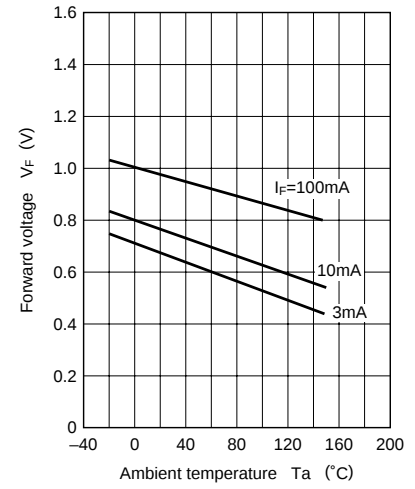
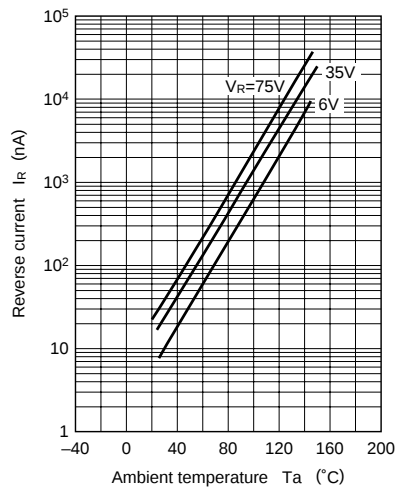
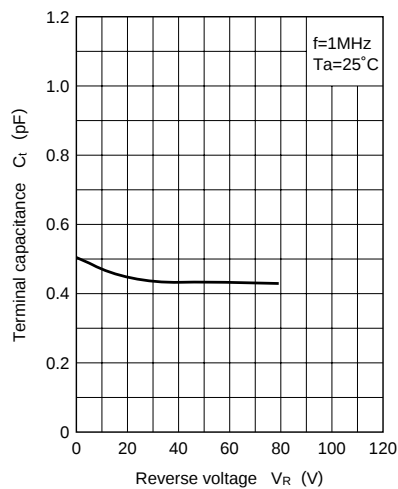
Note 1 : Rated input/output frequency : 100MHz

2 : * t_{rr} measuring circuit



■ Marking



$I_F - V_F$  $I_R - V_R$  $V_F - T_a$  $I_R - T_a$  $C_t - V_R$  $I_F(\text{surge}) - t_W$ 