

MA740

Silicon epitaxial planer type

For super high-speed switching circuit
For small current rectification

Features

- Two elements are incorporated in MA721 (series connection)
- Rectification with $I_{F(AV)}=200\text{mA}$ (single value)

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current	Single	200	mA
	Double	130* ¹	
Peak forward current	Single	300	mA
	Double	220* ¹	
Non-repetitive peak forward surge current	Single	1	A
	Double	0.7* ¹	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

*¹ Use value per chip

*² 50Hz sine wave, one-cycle wave, high value (non-repetitive)

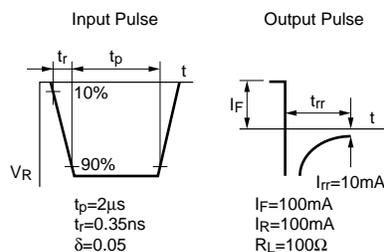
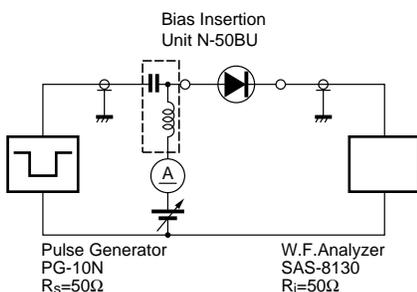
Electrical Characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R=30\text{V}$			50	μA
Forward voltage (DC)	V_F	$I_F=200\text{mA}$			0.55	V
Terminal capacitance	C_t	$V_R=0\text{V}$, $f=1\text{MHz}$		30		pF
Reverse recovery time	t_{rr} *	$I_F=I_R=100\text{mA}$ $I_{rr}=10\text{mA}$, $R_L=100\Omega$		3		ns

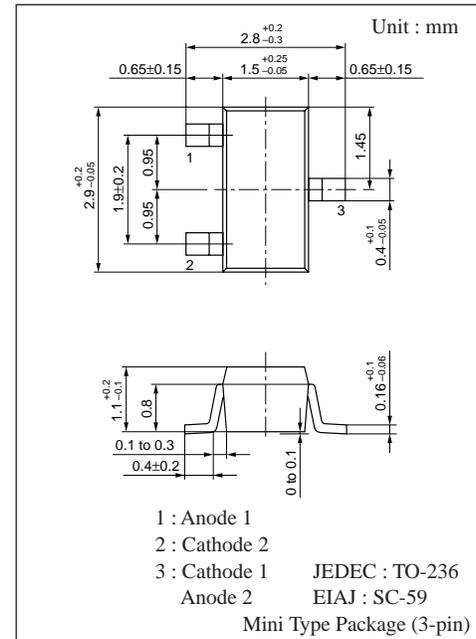
Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

2. Rated input/output frequency : 1000MHz

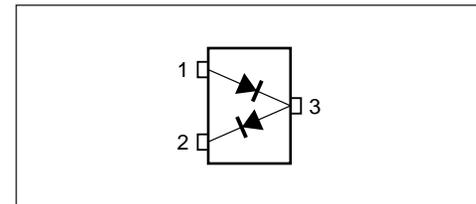
3. * t_{rr} measuring circuit



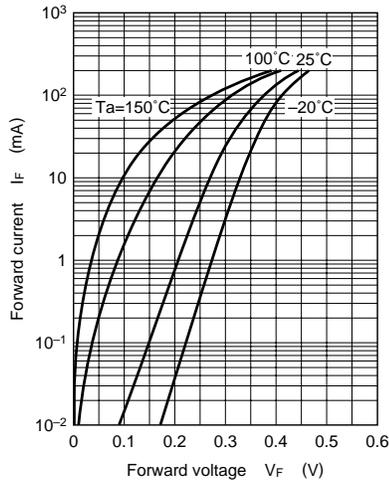
Marking



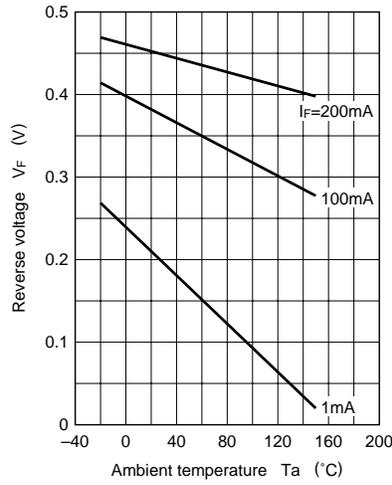
Internal Connection



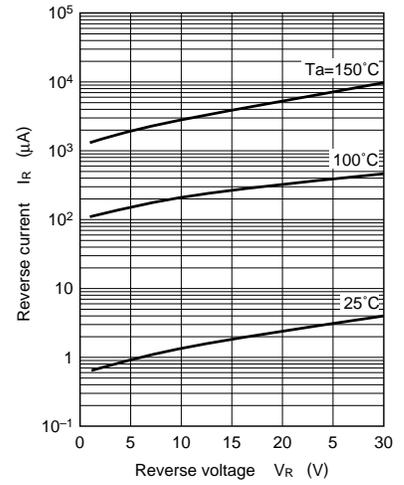
$I_F - V_F$



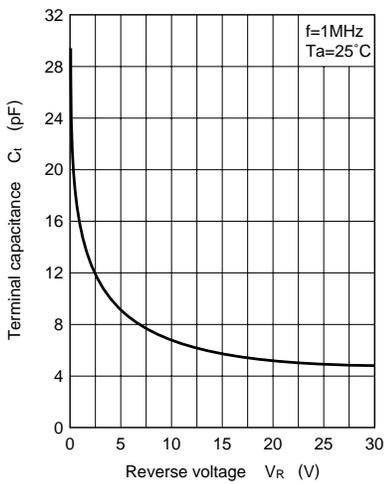
$V_F - T_a$



$I_R - V_R$



$C_t - V_R$



$I_R - T_a$

