

MA744

Silicon epitaxial planer type

For super high-speed switching circuit
For small current rectification

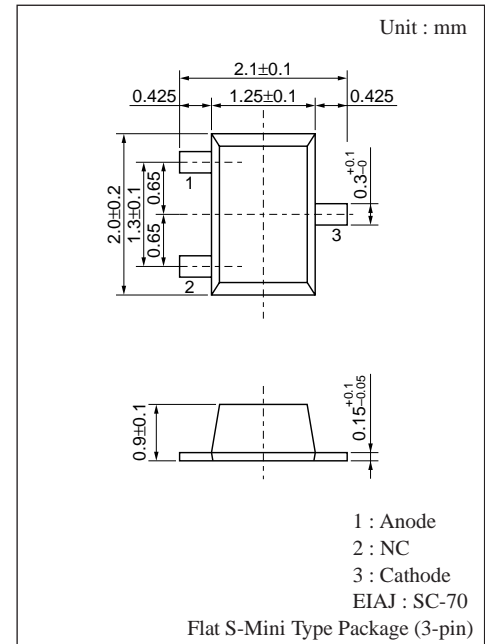
■ Features

- Small S-Mini package for high-density mounting
- $I_{P(AV)}=200\text{mA}$ rectification possible

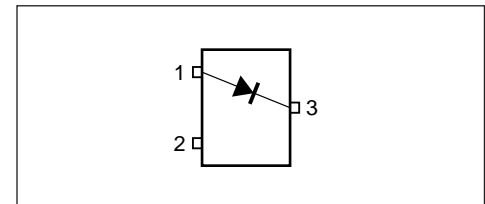
■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

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

*1 50Hz sine wave, one-cycle wave, high value (non-repetitive)



■ Internal Connection



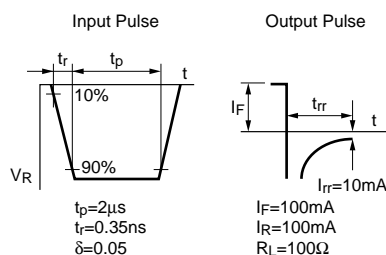
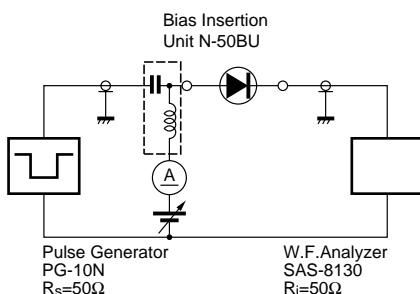
■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

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

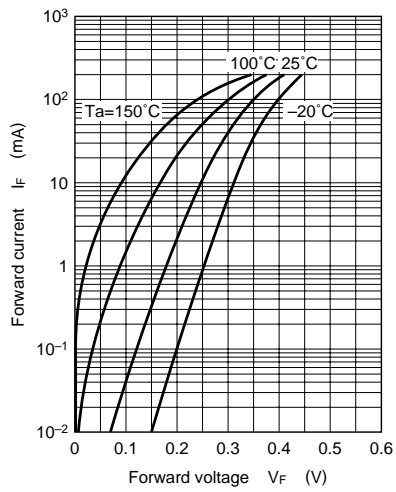
3. * t_{rr} measuring circuit



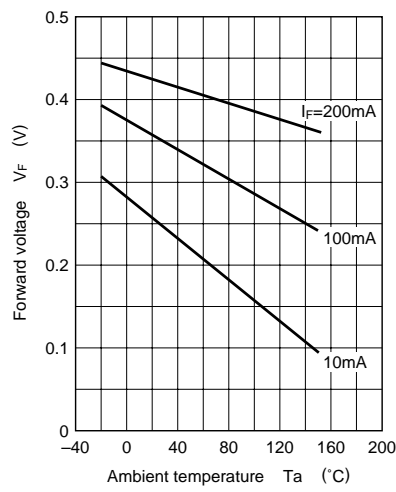
■ Marking



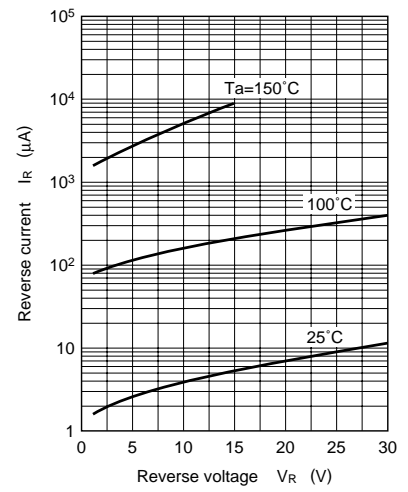
$I_F - V_F$



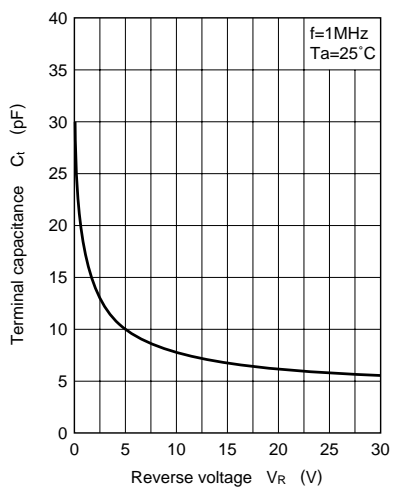
$V_F - T_a$



$I_R - V_R$



$C_t - V_R$



$I_R - T_a$

