

MA785

Silicon epitaxial planer type

For super high-speed switching circuit

For small current rectification

■ Features

- S-Mini type 2-pin package, enabling high-density mounting
- $I_{F(AV)}=100\text{mA}$ rectification possible
- Fast reverse recovery time t_{rr} , optimum for high-frequency rectification
- Low V_F (forward voltage) with high rectification efficiency
- Reverse voltage V_R (DC value)= 50V guaranteed

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	50	V
Repetitive peak reverse voltage	V_{RRM}	50	V
Peak forward current	I_{FM}	300	mA
Average forward current	$I_{F(AV)}$	100	mA
Non-repetitive peak forward surge current	I_{FSM}^*	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to +125	$^\circ\text{C}$

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

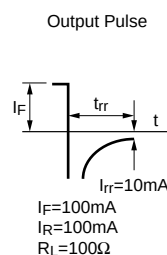
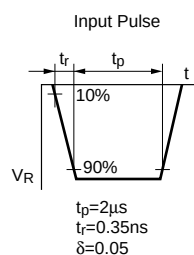
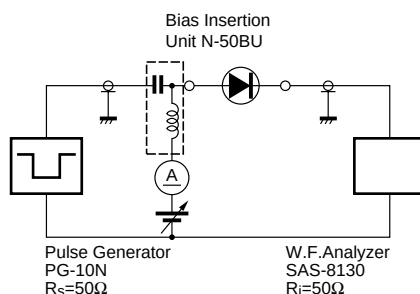
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R = 50\text{V}$			30	μA
Forward voltage (DC)	V_F	$I_F = 100\text{mA}$			0.55	V
Terminal capacitance	C_t	$V_R = 0\text{V}$, $f = 1\text{MHz}$		25		pF
Reverse recovery time	t_{rr}^*	$I_F = I_R = 100\text{mA}$ $I_{rr} = 10\text{mA}$, $R_L = 100\Omega$		3		ns

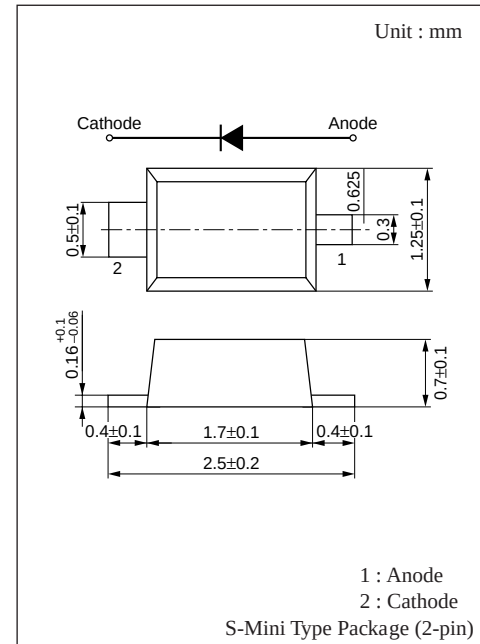
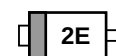
Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

2. Rated input/output frequency : 200MHz

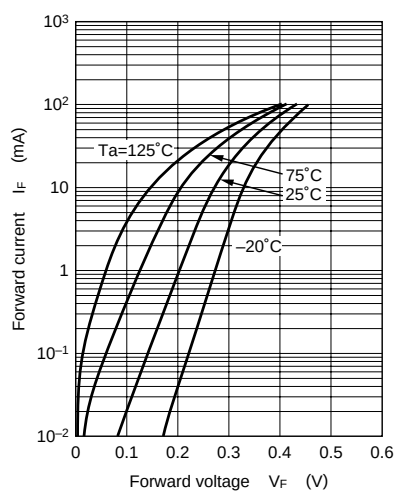
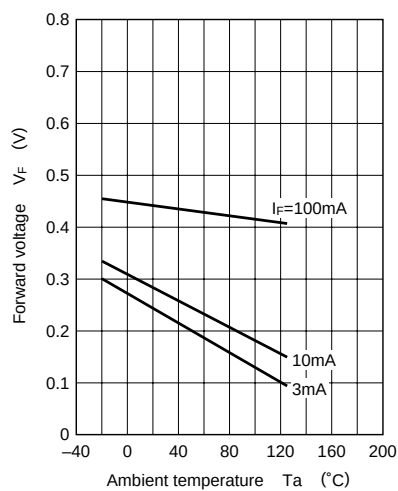
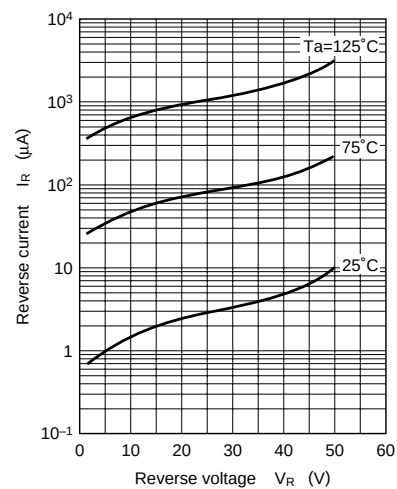
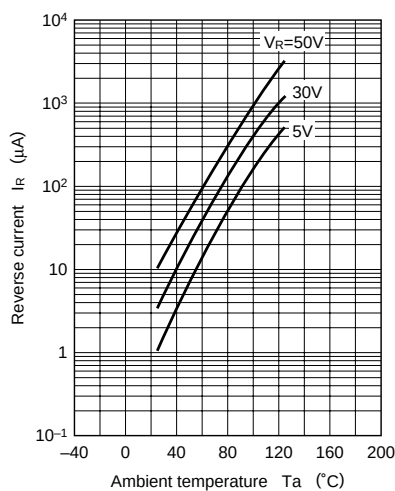
3. * t_{rr} measuring circuit



■ Marking



Marking Symbol : 2E

$I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $I_R - T_a$  $C_t - V_R$ 