

MA796

Silicon epitaxial planer type

For super high-speed switching circuit

For small current rectification

■ Features

- Two elements are incorporated in MA787 (of a type in the same direction)
- $I_{F(AV)}=100\text{mA}$ 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	Single	300	mA
	Double	200*2	
Average forward current	Single	100	mA
	Double	70*2	
Non-repetitive peak forward surge current	I_{FSM}^{*1}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to +125	$^\circ\text{C}$

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

* 2 Use value per chip

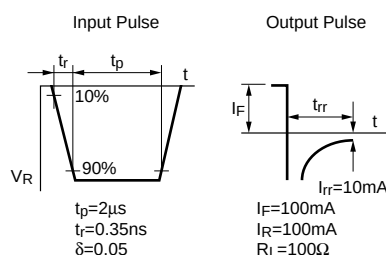
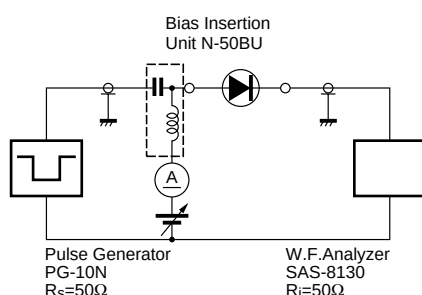
■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

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

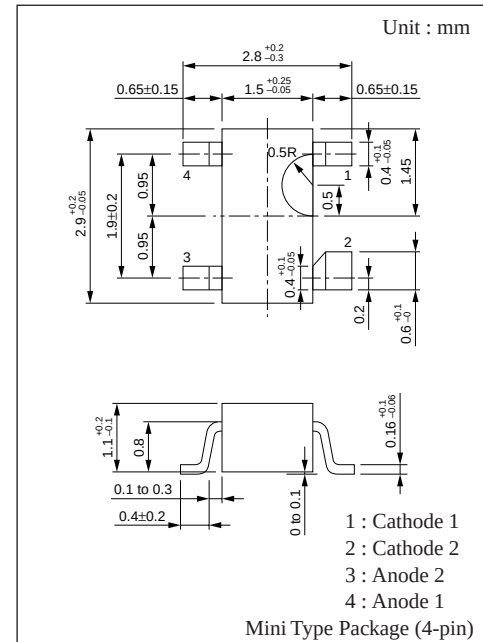
Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

2. Rated input/output frequency : 200MHz

3. * t_{rr} measuring circuit

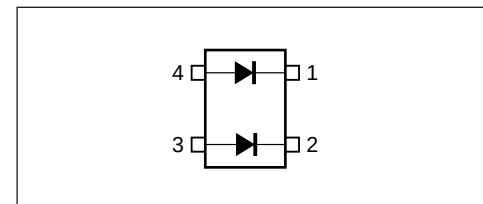


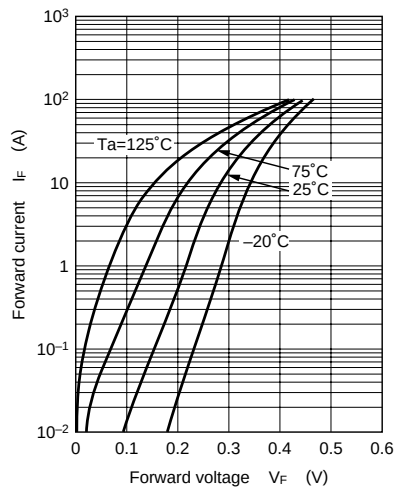
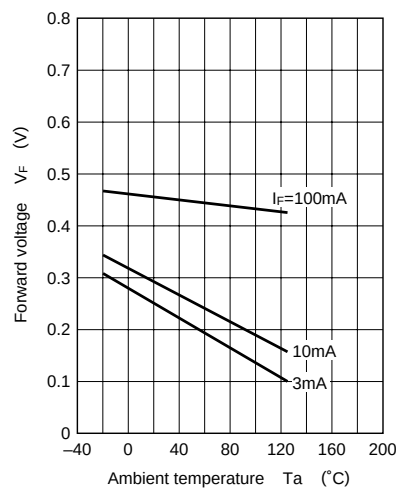
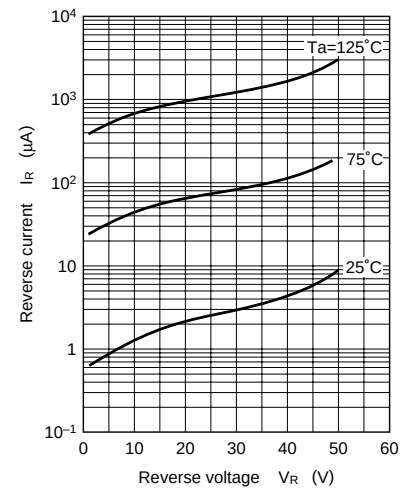
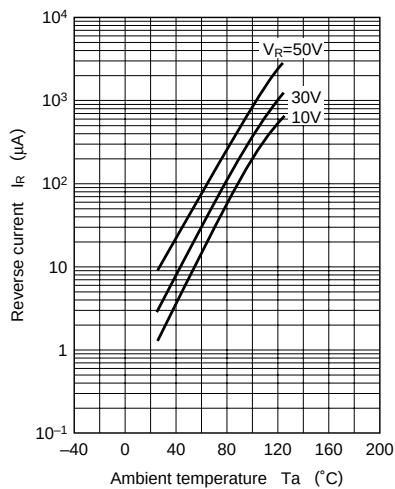
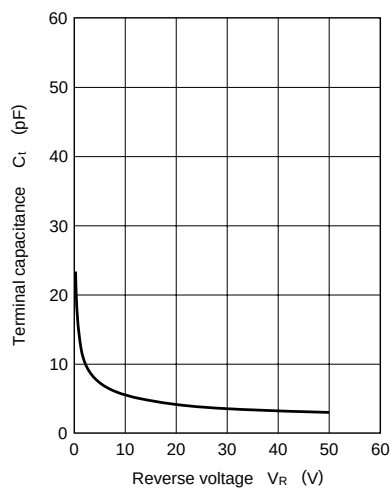
■ Marking



Marking Symbol : M4B

■ Internal Connection



$I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $I_R - T_a$  $C_t - V_R$  $I_{F(\text{surge})} - t_w$ 