

MA4X796 (MA796)

Silicon epitaxial planar type

For super-high speed switching circuit

For small current rectification

■ Features

- Two MA3X787s in the same direction are contained in one package
- Allowing to rectify under ($I_{F(AV)} = 100$ mA) condition
- Optimum for high-frequency rectification because of its short reverse recovery time (t_{rr})
- Low V_F (forward rise voltage), with high rectification efficiency
- Reverse voltage V_R (DC value) = 50 V 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	I_{FM}	300 mA
	Double*2		200
Average forward current	Single	$I_{F(AV)}$	100 mA
	Double*2		70
Non-repetitive peak forward surge current*1	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note) *1: The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

*2: Value per chip

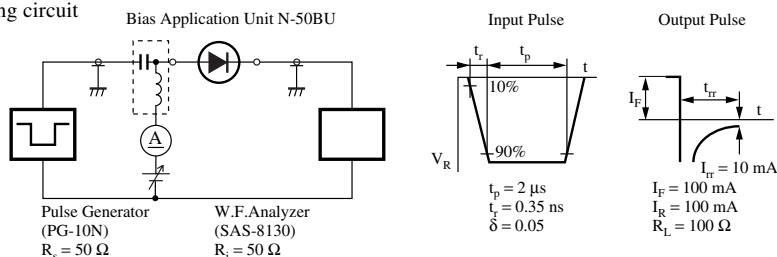
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 50$ V			30	μA
Forward voltage (DC)	V_F	$I_F = 100$ mA			0.55	V
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		25		pF
Reverse recovery time*	t_{rr}	$I_F = I_R = 100$ mA $I_{tr} = 10$ mA, $R_L = 100$ Ω		3		ns

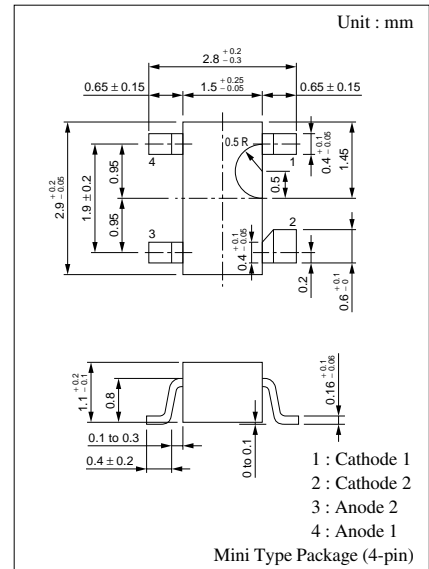
Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 200 MHz

3. *: t_{rr} measuring circuit

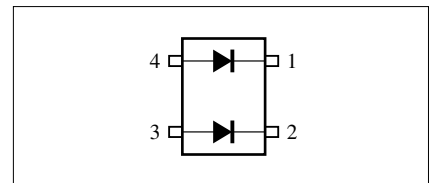


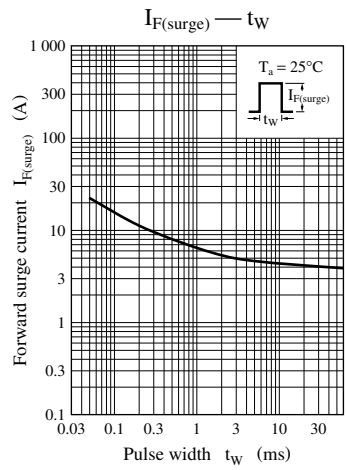
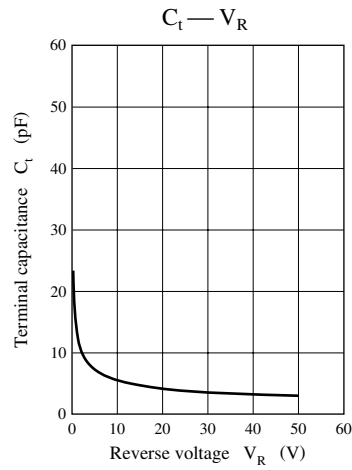
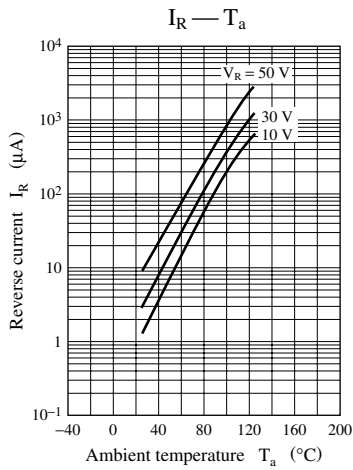
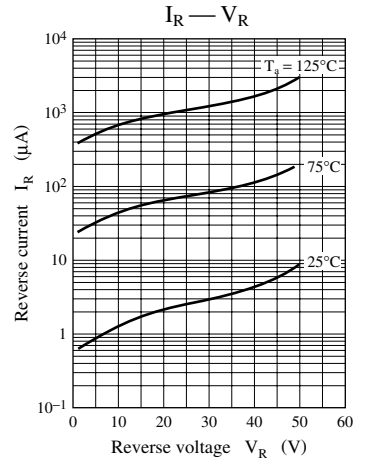
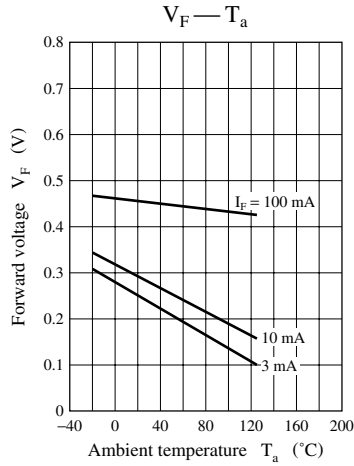
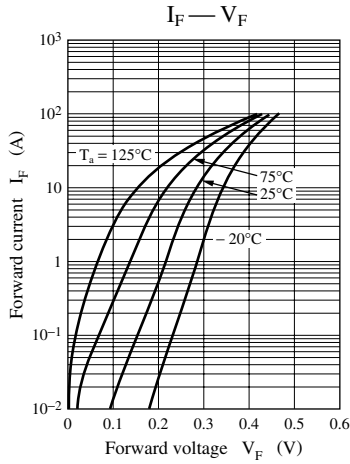
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M4B

Internal Connection





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