

MA4X746 (MA746)

Silicon epitaxial planar type

For super high speed switching

For small current rectification

■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- $I_{F(AV)} = 200$ mA and $V_R < 50$ V are achieved
- Optimum for high frequency rectification because of its short reverse recovery time (t_{rr})
- Low forward voltage V_F and good rectification efficiency
- Mini type 4-pin package

■ 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
Non-repetitive peak forward-surge-current *2	Single	I_{FSM}	1
	Double *1		0.75
Peak forward current	Single	I_{FM}	300
	Double *1		225
Average forward current	Single	$I_{F(AV)}$	200
	Double *1		150
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *1: Value per chip

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

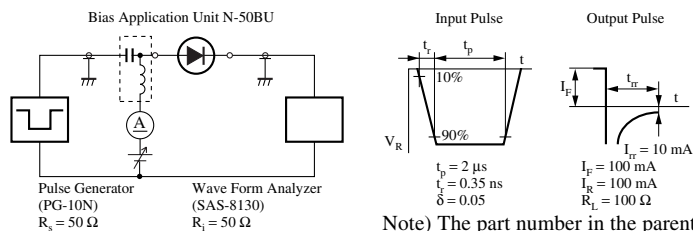
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 50$ V			200	μA
Forward voltage (DC)	V_{F1}	$I_F = 30$ mA			0.36	V
	V_{F2}	$I_F = 200$ mA			0.55	
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		30		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ Ω		3.0		ns

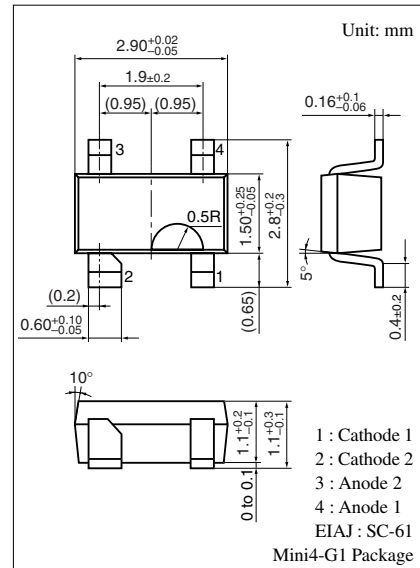
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

3. *: t_{rr} measuring instrument

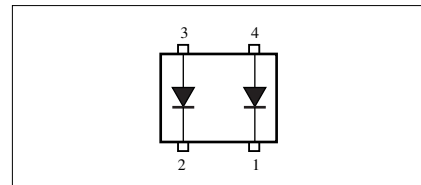


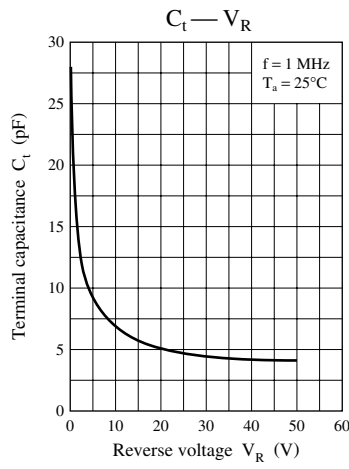
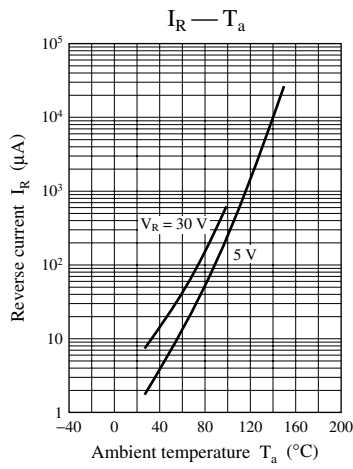
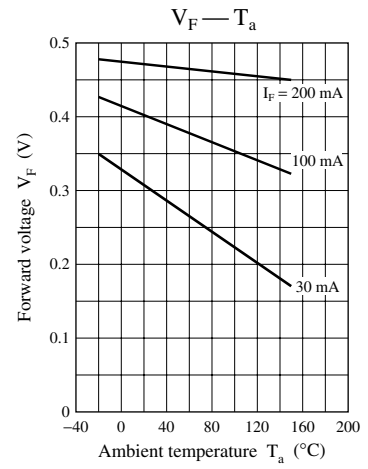
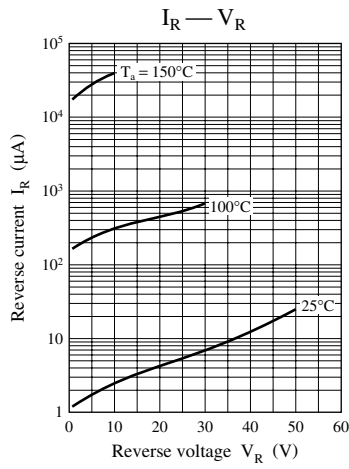
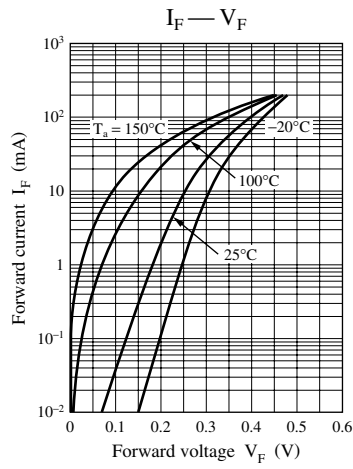
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M3M

Internal Connection





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