MA4X746 (MA746)

Silicon epitaxial planar type

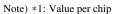
For super high speed switching For small current rectification

Features

- Two isolated elements are contained in one package, allowing high-density mounting
- $I_{F(AV)} = 200 \text{ mA}$ and $V_R < 50 \text{ V}$ 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 $T_a = 25$ °C

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	50	V
Repetitive peak reverse-voltage		V_{RRM}	50	V
Non-repetitive peak	Single	I_{FSM}	1	A
forward-surge-current *2	Double *1		0.75	
Peak forward	Single	I_{FM}	300	mA
current	Double *1		225	
Average forward	Single	I _{F(AV)}	200	mA
current	Double *1		150	
Junction temperature		T _j	150	°C
Storage temperature		T_{stg}	-55 to +150	°C



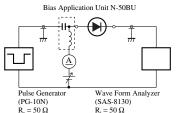
*2: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

■ Electrical Characteristics $T_a = 25$ °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I_R	$V_R = 50 \text{ V}$			200	μΑ
Forward voltage (DC)	V _{F1}	$I_F = 30 \text{ mA}$			0.36	V
	V_{F2}	$I_F = 200 \text{ mA}$			0.55	
Terminal capacitance	C _t	$V_R = 0 \text{ V, } f = 1 \text{ MHz}$		30		pF
Reverse recovery time *	t _{rr}	$I_F = I_R = 100 \text{ mA}$		3.0		ns
		$I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$				

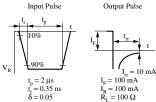
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

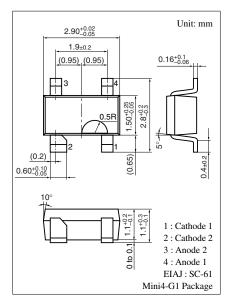


3. *: t_{rr} measuring instrument

Input Pulse Out

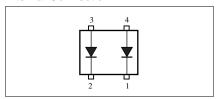


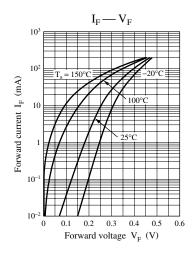
Note) The part number in the parenthesis shows conventional part number.

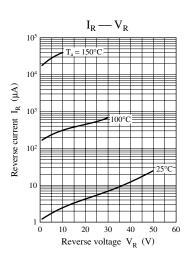


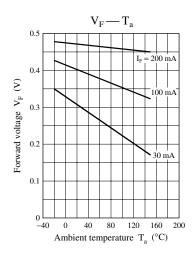
Marking Symbol: M3M

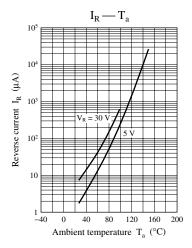
Internal Connection

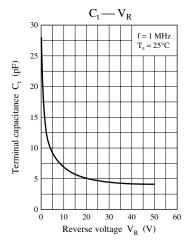












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