MA3X791 (MA791)

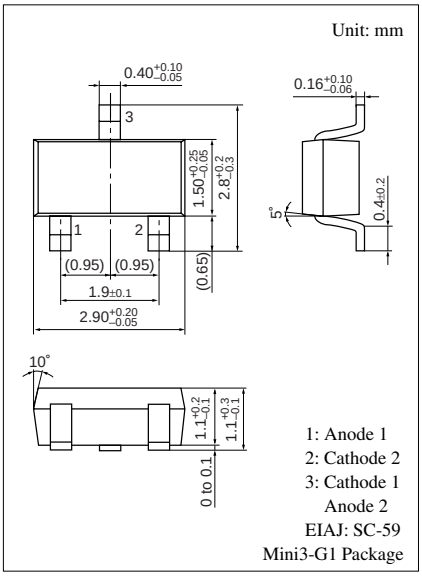
Silicon epitaxial planar type

For super high speed switching

For small current rectification

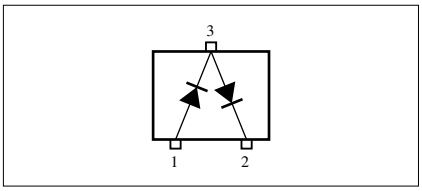
■ Features

- Two MA3X786 (MA786) is contained in one package (series connection)
- $I_{F(AV)}$ = 100 mA rectification is possible
- 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 3-pin package



Marking Symbol: M4A

Internal Connection



■ Absolute Maximum Ratings T_a = 25°C

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		V_R	30	V
Repetitive peak reverse-voltage		V_{RRM}	30	V
Peak forward current	Single	I_{FM}	300	mA
	Series *2 y		200	
Average forwar current	Single	$I_{F(AV)}$	100	mA
	Series *2 y		70	
Non-repetitive peak forward-surge-current *1		I_{FSM}	1	A
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	−55 to +125	°C

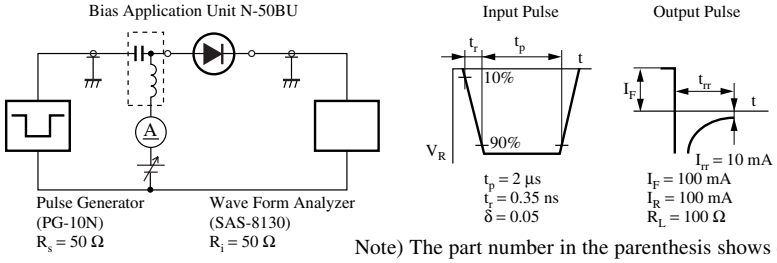
Note) ∗1: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)
∗2: Value per chip

■ Electrical Characteristics T_a = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 30 V			15	µA
Forward voltage (DC)	V_F	I_F = 100 mA			0.55	V
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		20		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA I_{rr} = 10 mA, R_L = 100 Ω		2		ns

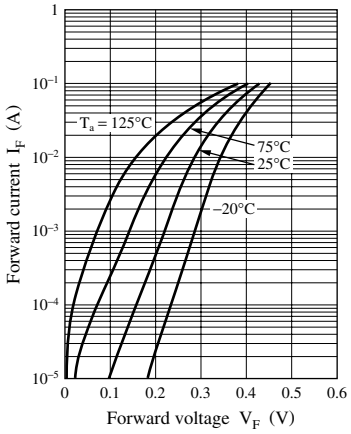
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

y 2. Rated input/output frequency: 250 MHz 3. ∗: t_{rr} measuring instrument

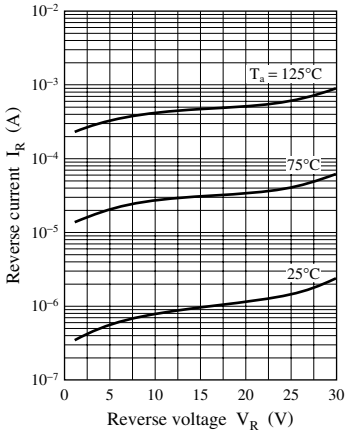


Note) The part number in the parenthesis shows conventional part number.

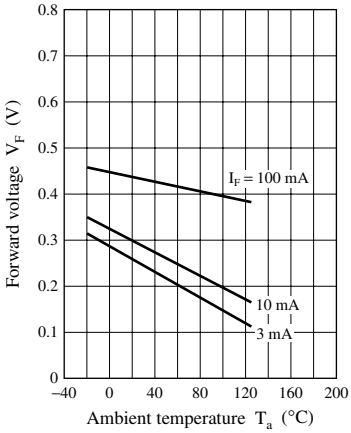
I_F — V_F



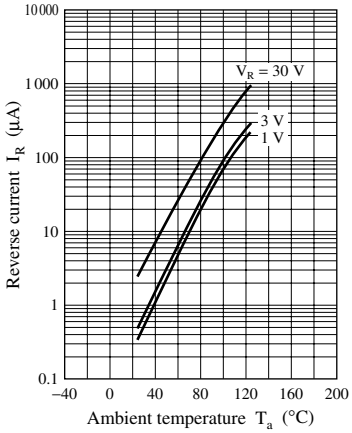
I_R — V_R



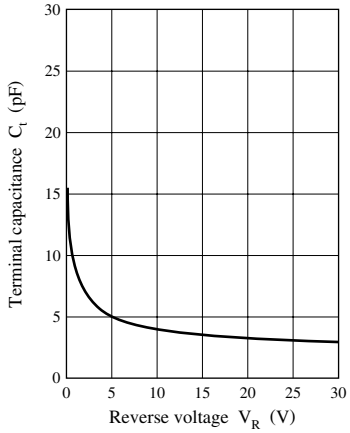
V_F — T_a



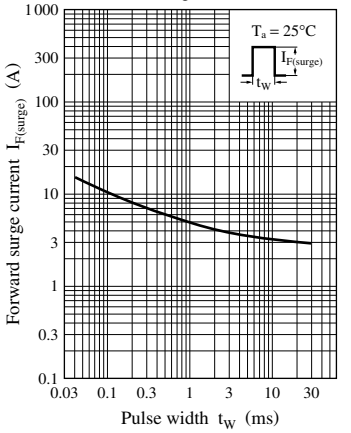
I_R — T_a



C_t — V_R



$I_{F(surge)}$ — t_W



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