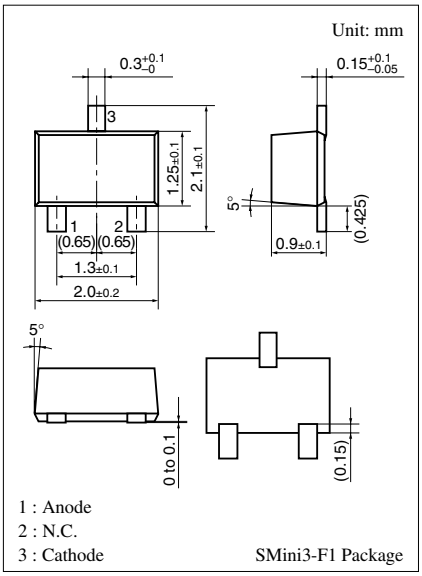
MA3J702 (MA10702)

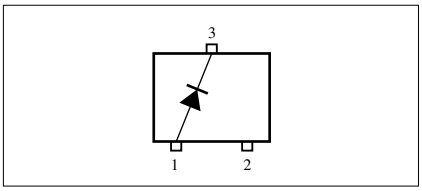
Silicon epitaxial planar type

For high frequency rectification



Marking Symbol: M4R

Internal Connection



■ Features

- $I_{F(AV)}$ = 500 mA rectification is possible
- Small reverse current I_R. (About 1/10 of I_R of the ordinary products)
- S-Mini type 3-pin package

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	20	V
Repetitive peak reverse-voltage	V_{RRM}	20	V
Average forward current	$I_{F(AV)}$	500	mA
Non-repetitive peak forward-surge-current *	I_{FSM}	3	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

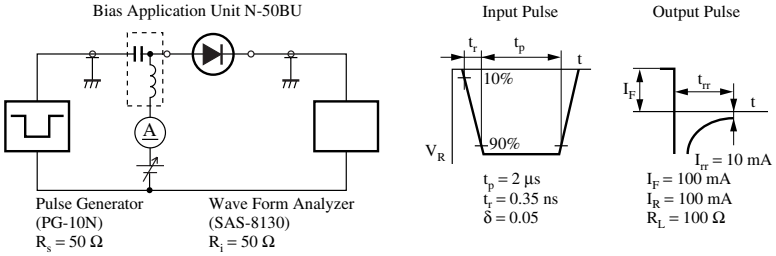
Note) ∗: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

■ Electrical Characteristics T_a = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_{R1}	V_R = 5 V			1	µA
	I_{R2}	V_R = 10 V			10	
Forward voltage (DC)	V_{F1}	I_F = 10 mA		0.3	0.4	V
	V_{F2}	I_F = 500 mA		0.5	0.55	
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		60		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA I_{rr} = 10 mA, R_L = 100 Ω		5		ns

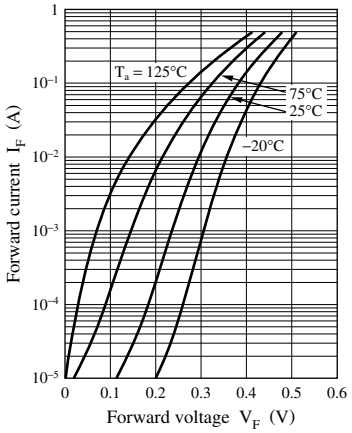
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 400 MHz 3. ∗: t_{rr} measuring instrument

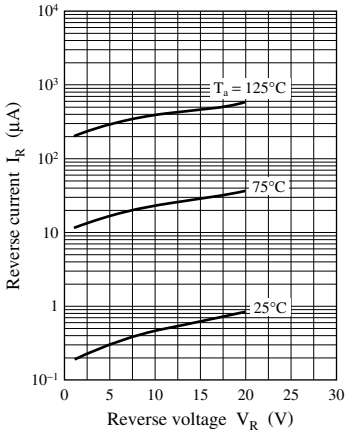


Note) The part number in the parenthesis shows conventional part number.

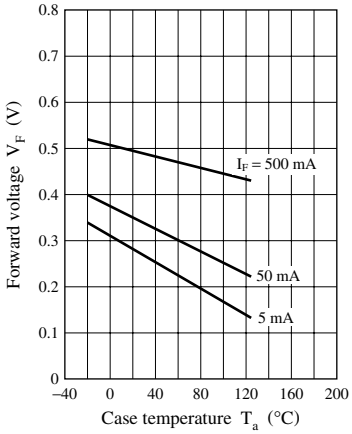
I_F — V_F



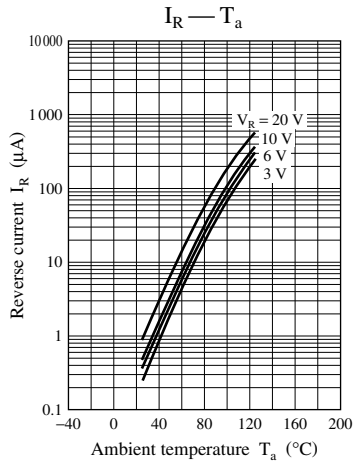
I_R — V_R



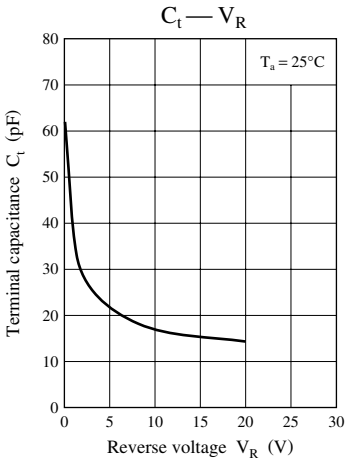
V_F — T_a



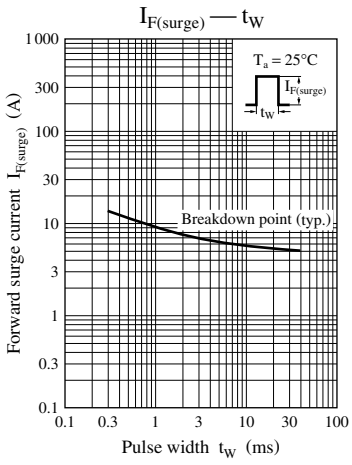
I_R — T_a



C_t — V_R



$I_{F(surge)}$ — t_W



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