

MA3J700 (MA10700)

Silicon epitaxial planar type

For high-frequency rectification

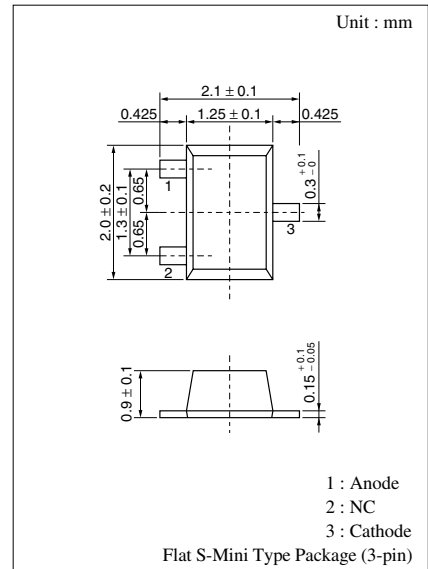
■ Features

- S-mini type 3-pin package
- Allowing to rectify under ($I_{F(AV)} = 500$ mA) condition
- Optimum for high-frequency rectification because of its short reverse recovery time (t_{rr})

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

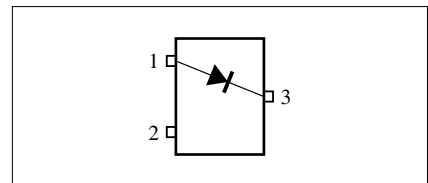
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
Repetitive peak reverse voltage	V_{RRM}	40	V
Average forward current	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current*	I_{FSM}	2	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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



Marking Symbol: M2W

Internal Connection



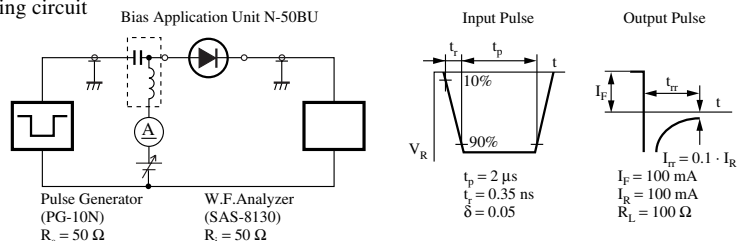
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 35$ V			100	μA
Forward voltage (DC)	V_F	$I_F = 500$ mA			0.55	V
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		60		pF
Reverse recovery time*	t_{rr}	$I_F = I_R = 100$ mA $I_{rr} = 0.1 \cdot I_R$, $R_L = 100$ Ω		5		ns

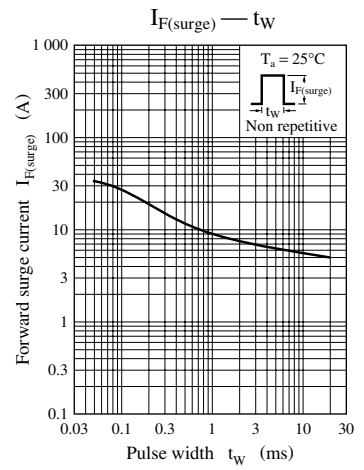
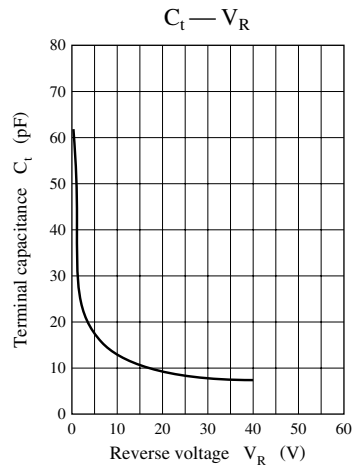
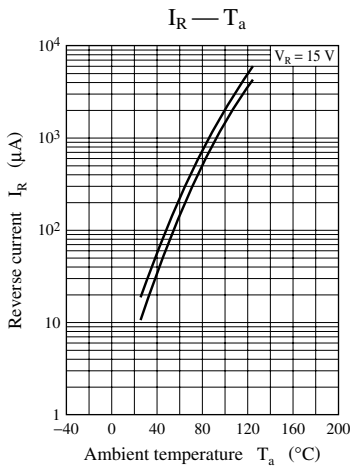
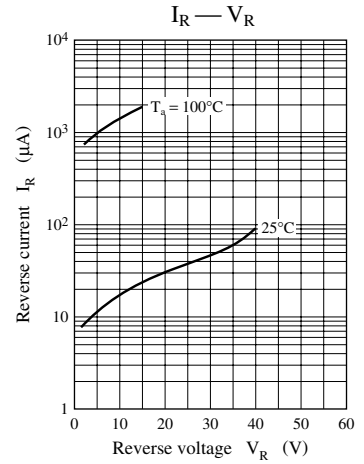
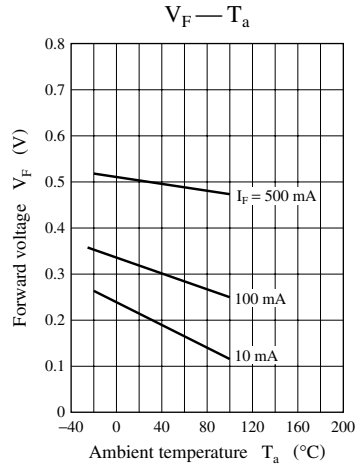
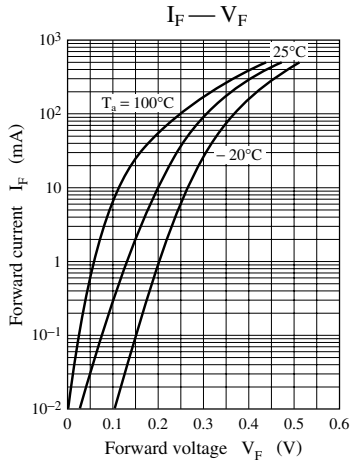
Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 400 MHz

3. * : t_{rr} measuring circuit



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



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