

MA2J727

Silicon epitaxial planar type

For super high speed switching

For small current rectification

■ Features

- $V_R = 50$ V is guaranteed
- $I_{F(AV)} = 200$ mA rectification is possible

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	50	V
Repetitive peak reverse voltage	V_{RRM}	50	V
Peak forward current	I_{FM}	300	mA
Forward current (Average)	$I_{F(AV)}$	200	mA
Non-repetitive peak forward surge current *	I_{FSM}	1	A
Junction temperature	T_j	150	$^\circ\text{C}$
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)

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

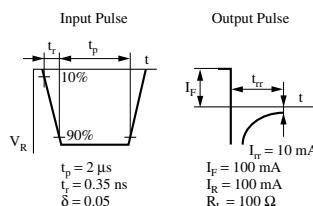
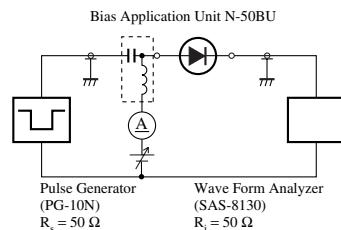
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 50$ V			200	μA
Forward voltage	V_{F1}	$I_F = 30$ mA			0.36	V
	V_{F2}	$I_F = 200$ mA			0.55	V
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz	30			pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100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

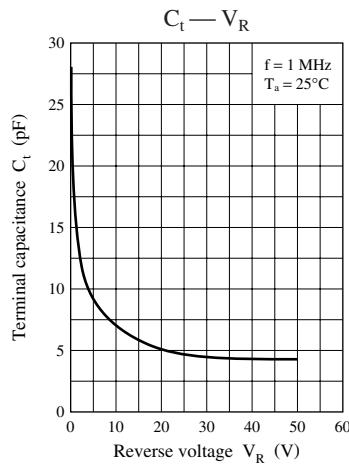
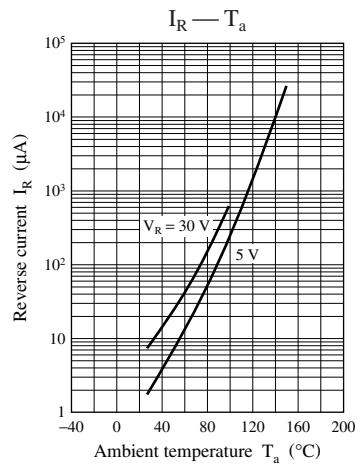
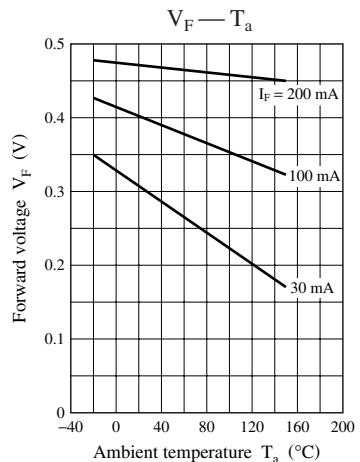
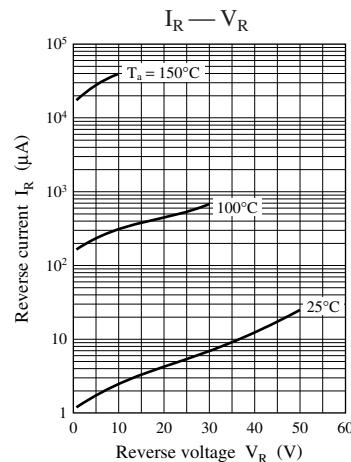
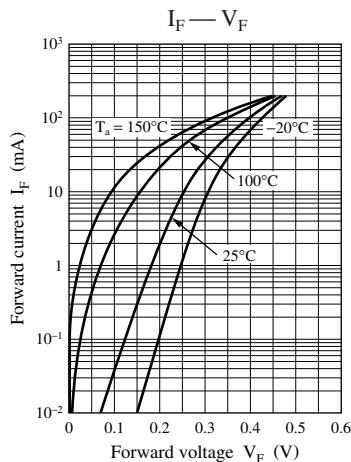
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. 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.

3. Absolute frequency of input and output is 1 GHz.

4. *: t_{rr} measurement circuit





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Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.

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