

MA3X727 (MA727)

Silicon epitaxial planar type

For super high speed switching

For small current rectification

■ Features

- Reverse voltage $V_R = 50$ V is guaranteed
- Forward current (Average) $I_{F(AV)} = 200$ 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 $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

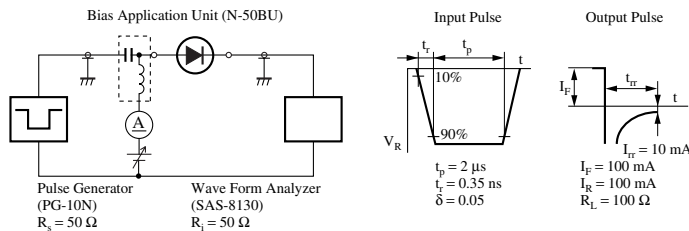
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 30$ mA			0.36	V
	V_{F2}	$I_F = 200$ mA			0.55	V
Reverse current	I_R	$V_R = 50$ V			200	μA
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		30		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA $I_{tr} = 10$ mA, $R_L = 100$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

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

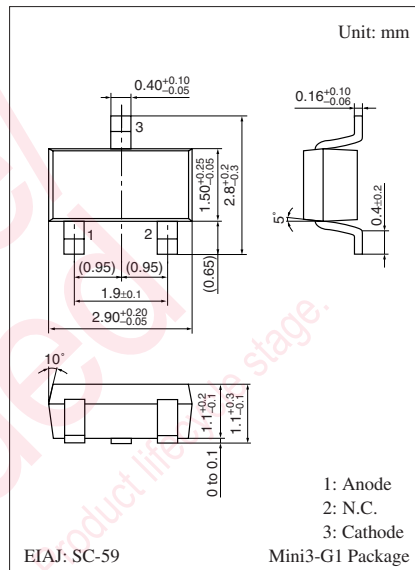
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

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

4. *: t_{rr} measurement circuit

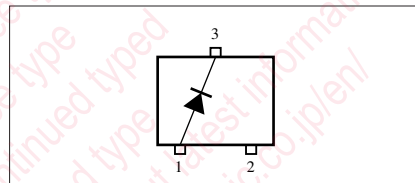


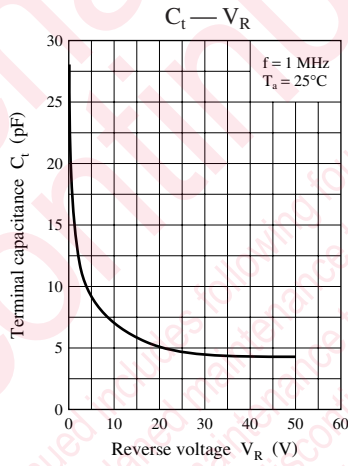
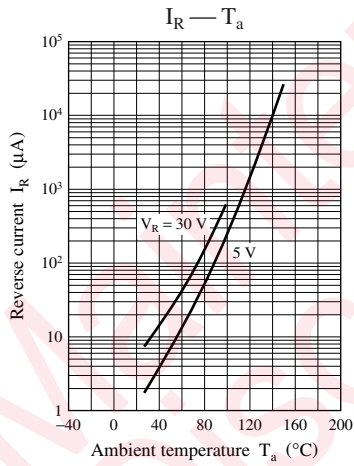
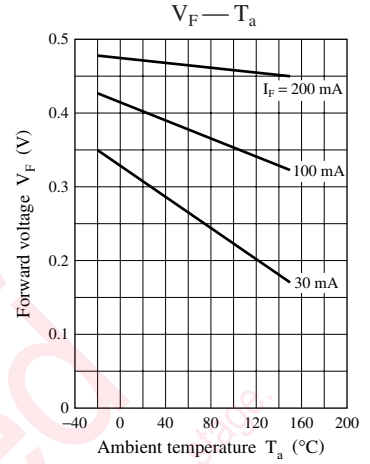
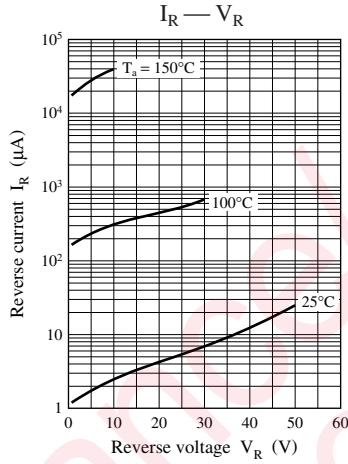
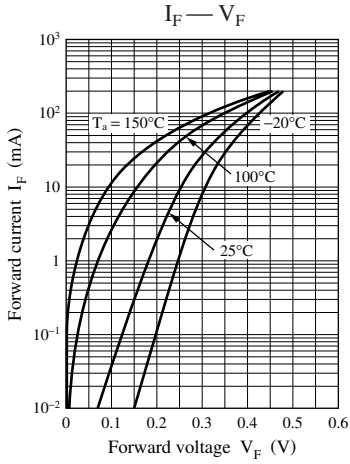
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1Z

Internal Connection





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