

MA3X786 (MA786)

Silicon epitaxial planar type

For super high speed switching
For small current rectification

■ Features

- Forward current (Average) $I_{F(AV)} = 100$ 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

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Peak forward current	I_{FM}	300	mA
Forward current (Average)	$I_{F(AV)}$	100	mA
Non-repetitive peak forward surge current *	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

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

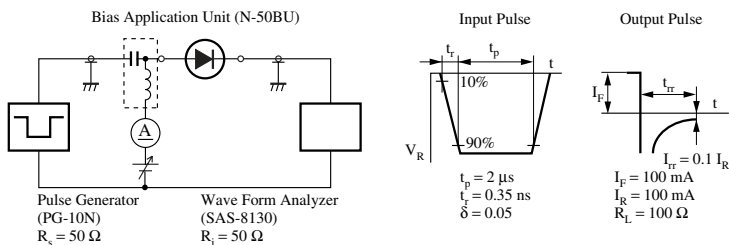
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100$ mA			0.55	V
Reverse current	I_R	$V_R = 30$ V			15	μA
Terminal capacitance	C_t	$V_R = 0$ V, $f = 1$ MHz		20		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100$ mA $I_{rr} = 0.1 I_R$, $R_L = 100 \Omega$		2.0		ns

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

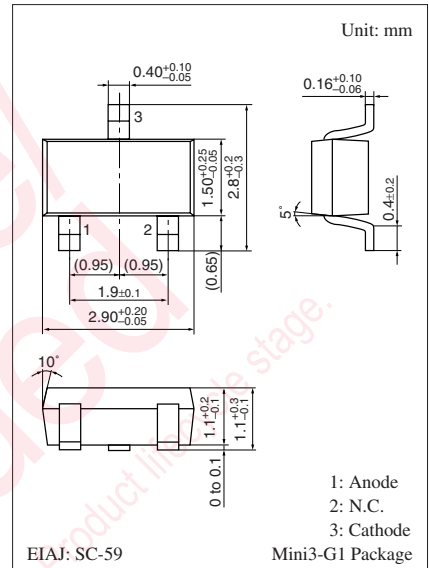
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 250 MHz.

4. *: t_{rr} measurement circuit

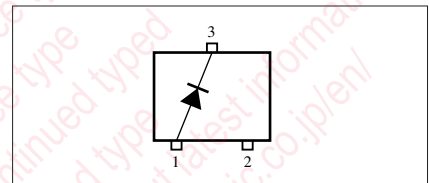


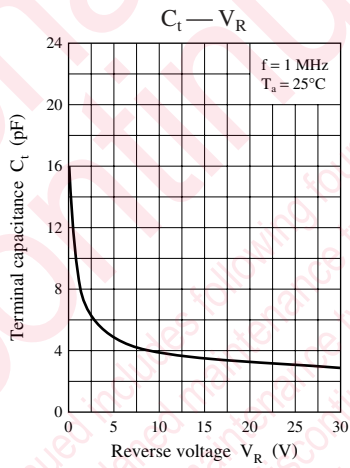
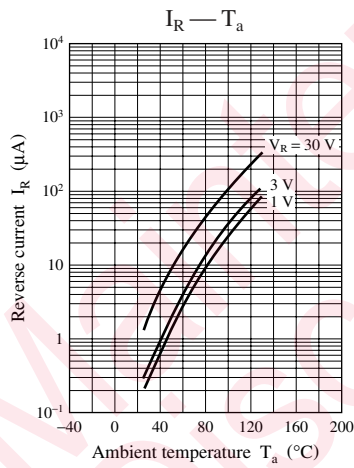
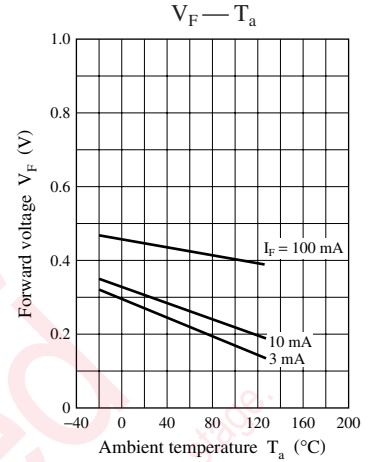
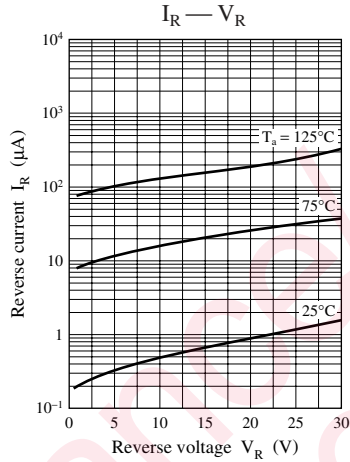
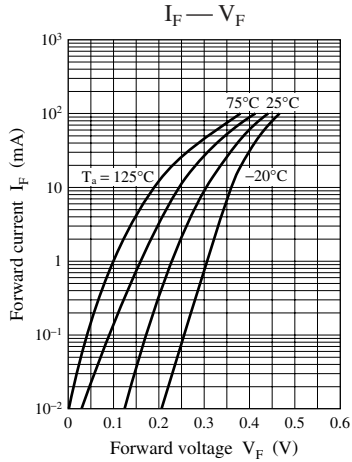
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M3T

Internal Connection





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