

MA3X786 (MA786)

Silicon epitaxial planar type

For super-high speed switching circuit
For small current rectification

■ Features

- Allowing to rectify under ($I_{F(AV)} = 100 \text{ mA}$) condition
- Optimum for high-frequency rectification because of its short reverse recovery time (t_{rr})
- Low V_F (forward rise voltage), with high rectification efficiency

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Peak forward current	I_{FM}	300	mA
Average forward current	$I_{F(AV)}$	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 $T_a = 25^\circ\text{C}$

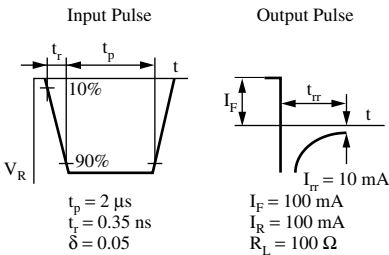
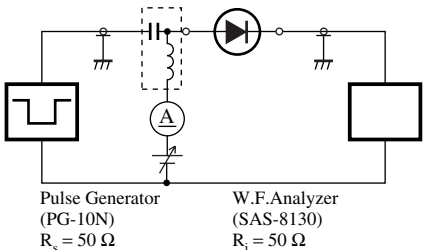
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30 \text{ V}$			15	μA
Forward voltage (DC)	V_F	$I_F = 100 \text{ mA}$			0.55	V
Terminal capacitance	C_t	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		20		pF
Reverse recovery time*	t_{rr}	$I_F = I_R = 100 \text{ mA}$ $I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		2		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.

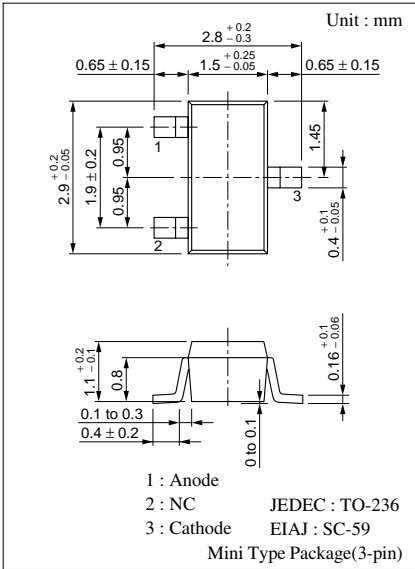
2. Rated input/output frequency: 250 MHz

3. *: t_{rr} measuring circuit

Bias Application Unit N-50BU

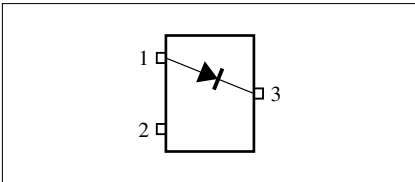


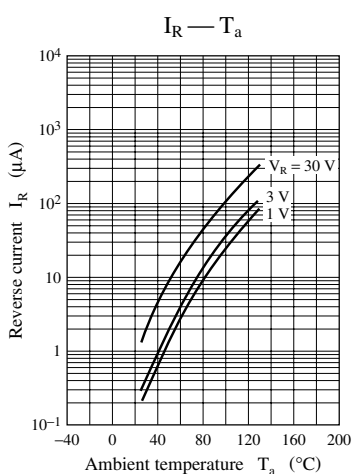
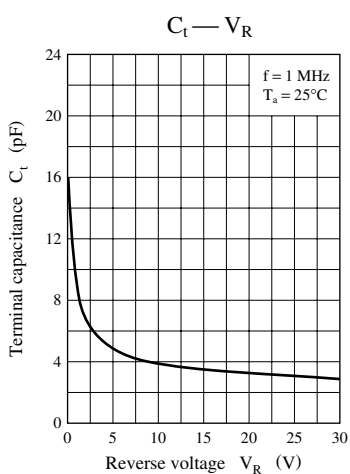
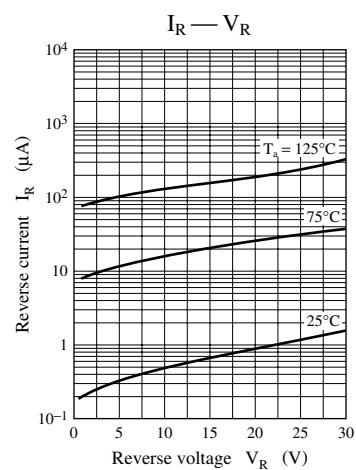
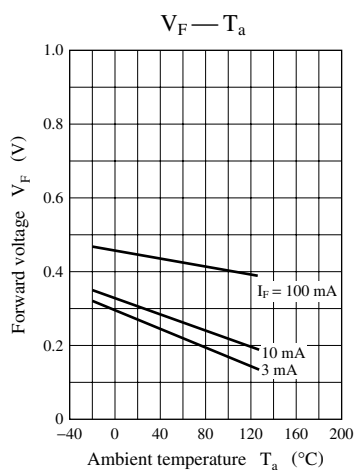
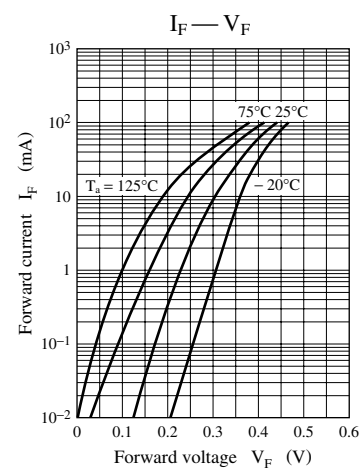
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M3T

Internal Connection





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