

MA3X703

Silicon epitaxial planar type

For high-frequency rectification

■ Features

- Mini type 3-pin package
- Allowing to rectify under ($I_{F(AV)} = 500 \text{ mA}$) condition
- Low I_R (reverse current) type. (About 1/10 of I_R of the ordinary products)

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	20	V
Repetitive peak reverse voltage	V_{RRM}	20	V
Average forward current	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current*	I_{FSM}	3	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)

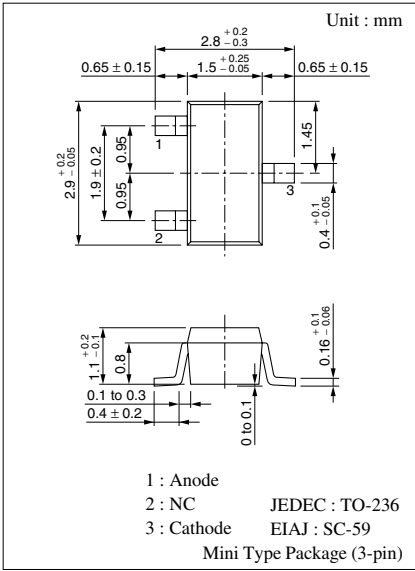
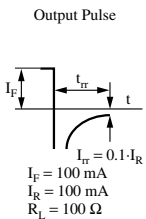
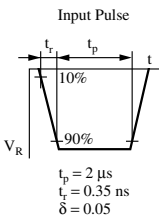
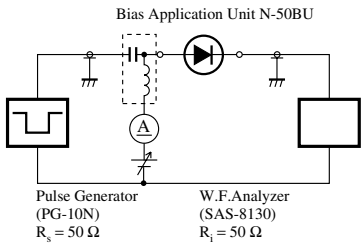
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_{R1}	$V_R = 10 \text{ V}$			10	μA
	I_{R2}	$V_R = 5 \text{ V}$			1	μA
Forward voltage (DC)	V_{F1}	$I_F = 500 \text{ mA}$		0.5	0.55	V
	V_{F2}	$I_F = 10 \text{ mA}$		0.3	0.4	V
Terminal capacitance	C_t	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		60		pF
Reverse recovery time*	t_{rr}	$I_F = I_R = 100 \text{ mA}$ $I_{tr} = 0.1 \cdot I_R, R_L = 100 \Omega$		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



Marking Symbol: M4R

Internal Connection

