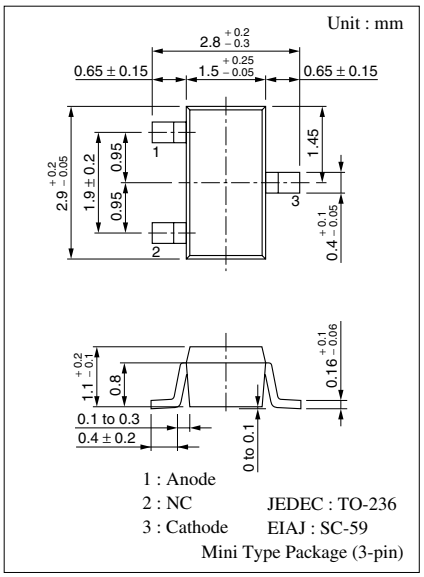
MA3X789

Silicon epitaxial planar type

For super-high speed switching circuit
For small current rectification

■ Features

- Allowing to rectify under ($I_{F(AV)}$ = 200 mA) condition
- Reverse voltage V_R (DC value) = 60 V guaranteed



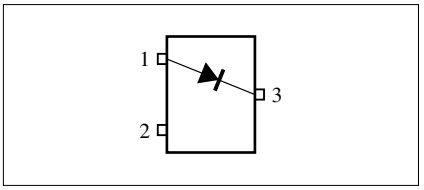
Marking Symbol: M3W

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	60	V
Peak reverse voltage	V_{RM}	60	V
Average forward current	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current*	I_{FSM}	2	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

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

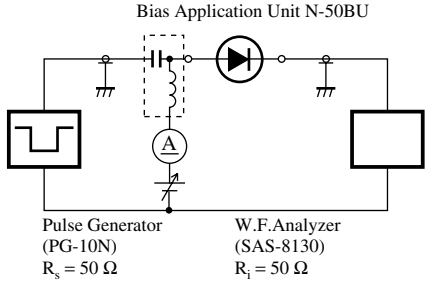
Internal Connection

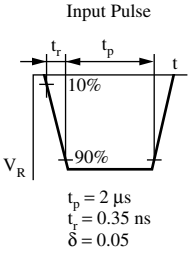


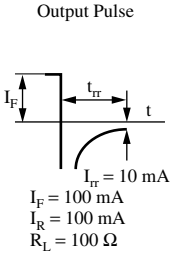
■ Electrical Characteristics T_a = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 50 V			100	μA
Forward voltage (DC)	V_F	I_F = 500 mA			0.65	V
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		60		pF
Reverse recovery time*	t_{rr}	I_F = I_R = 100 mA I_{rr} = 10 mA, R_L = 100 Ω		4.5		ns

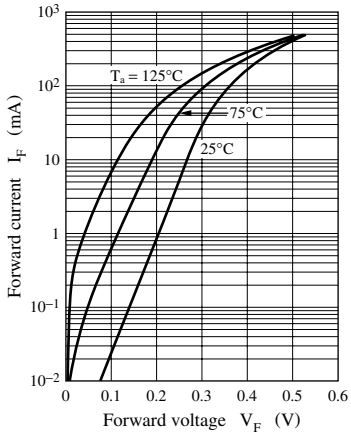
Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
2. Rated input/output frequency: 100 MHz
3. * : t_{rr} measuring circuit



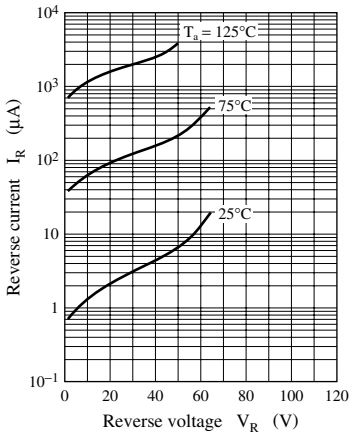




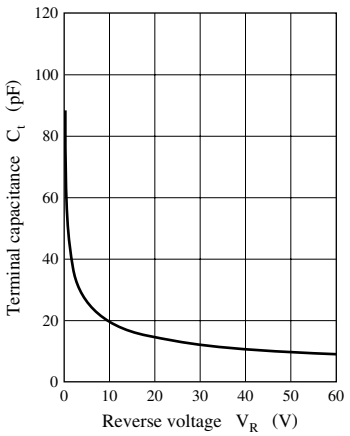
I_F — V_F



I_R — V_R



C_t — V_R



$I_{F(surge)}$ — t_W