

MA2Z748

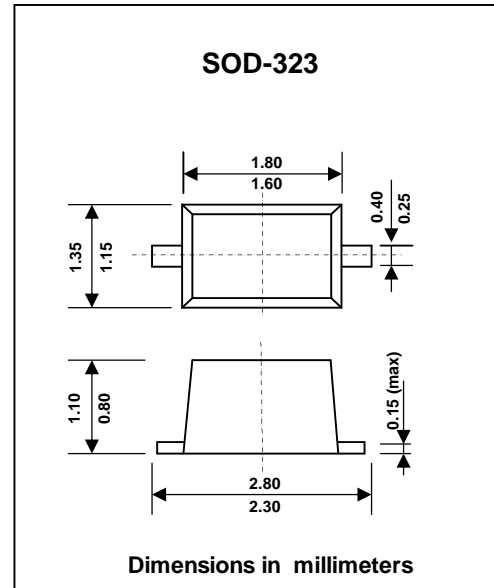
FEATURES :

- Low V_F
- High rectification efficiency caused by its low forward - rise - voltage (V_F)
- Optimum for high - frequency rectification because of its short reverse recovery time (t_{rr})

APPLICATIONS

- For super-high speed switching circuit
- For small current rectification

Schottky Barrier Diode



Maximum Ratings and Thermal Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RRM}	20	V
Maximum Reverse Voltage (DC)	V_R	20	V
Maximum Average Forward Current	$I_{F(AV)}$	300	mA
Maximum Surge Current (Note 1)	I_{FSM}	3.0	A
Maximum Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to + 125	$^\circ\text{C}$

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

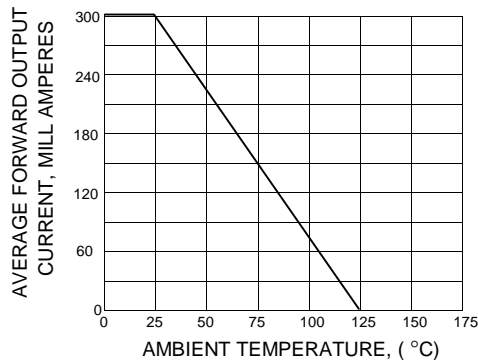
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage (DC)	V_F	$I_F = 300 \text{ mA}$	-	-	0.4	V
Reverse Current (DC)	I_R	$V_R = 10 \text{ V}$	-	-	30	μA
Terminal Capacitance	C_T	$f = 1\text{MHz}; V_R = 0 \text{ V}$	-	60	-	pF
Reverse Recovery Time (Note 2)	T_{rr}	$I_F = I_R = 100 \text{ mA}$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$	-	5	-	ns

Notes:

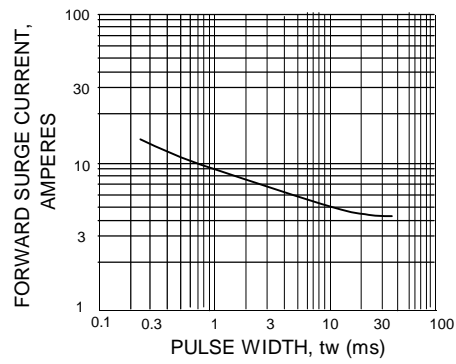
1. The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)
2. T_{rr} measuring instrument

RATING AND CHARACTERISTIC CURVES (MA2Z748)

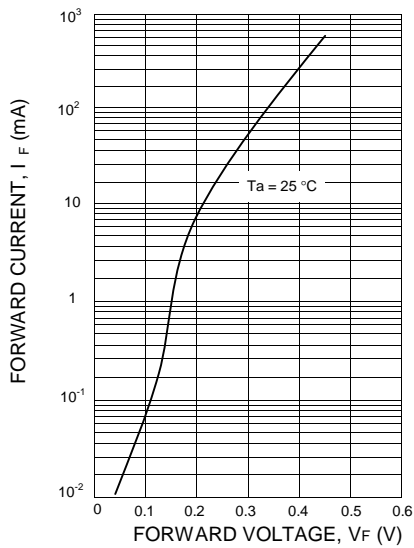
$I_{F(AV)} - T_a$



$I_{F(surge)} - t_w$



$I_F - V_F$



$I_R - V_R$

