SWITCHING DIODE

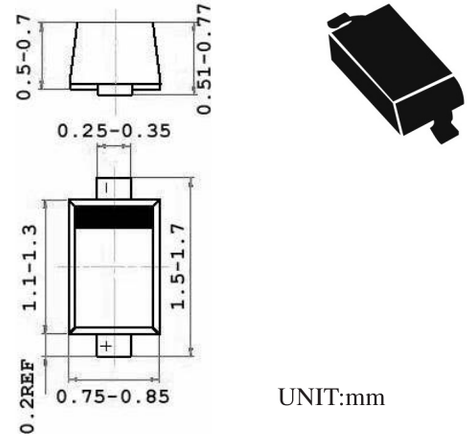
VOLTAGE RANGE: 100 VOLTS
CURRENT: 500mA

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

MARKING: 48

SOD-523



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameters	Symbols	Limits	UNITS
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100 100 75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Peak Forward Surge Current @=1.0μs @=1.0s	I_{FSM}	4.0 2.0	A
Power Dissipation	P_d	150	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625	K/W
Storage Temperature	T_{STG}	-65~+150	℃

ELECTRICAL RATINGS

Parameters	Symbols	Test conditions	Min.	Typ.	Max.	UNITS
Reverse Breakdown Voltage	$V_{(BR)R}$ $V_{(BR)R}$	I_R =5μA I_R =100μA	75 100			V V
Forward Voltage	V_{F1} V_{F2}	I_F=5mA I_F=100mA	0.62		0.72 1.0	V V
Reverse Current	I_R	V_R=20V			25	nA
Capacitance between Terminals	C_T	V_R =0V, f=1MHz			4	pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 10mA, I_{rr}=0.1*I_R, R_L=100Ω			4	ns