

SOD-523 SCHOTTKY BARRIER DIODE

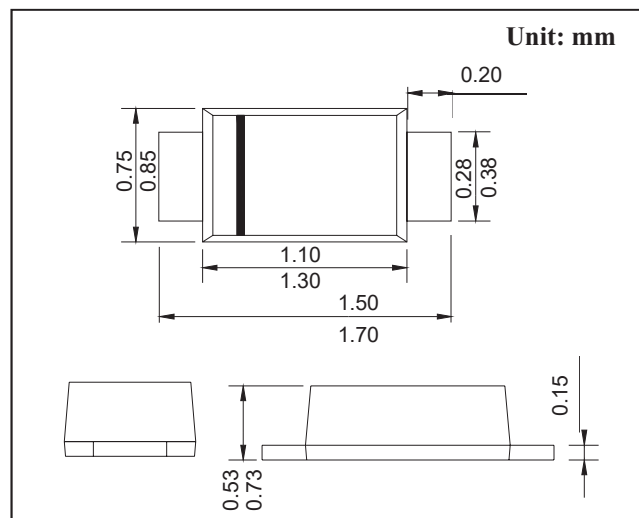
VOLTAGE RANGE: 40V PEAK PULSE POWER:150mW

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient
- Protection Negligible Reverse Recovery Time
- Very Low Reverse Capacitance

MECHANICAL DATA

- Case: SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Peak repetitive peak reverse voltage	V_{RRM}	40	V
Working peak	V_{RWM}		
DC blocking voltage	V_R		
RMS reverse voltage	$V_{R(RMS)}$	28	V
Forward continuous current	I_{FM}	350	mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0s$	I_{FRM}	1.5	A
Power Dissipation	P_d	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	667	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	°C

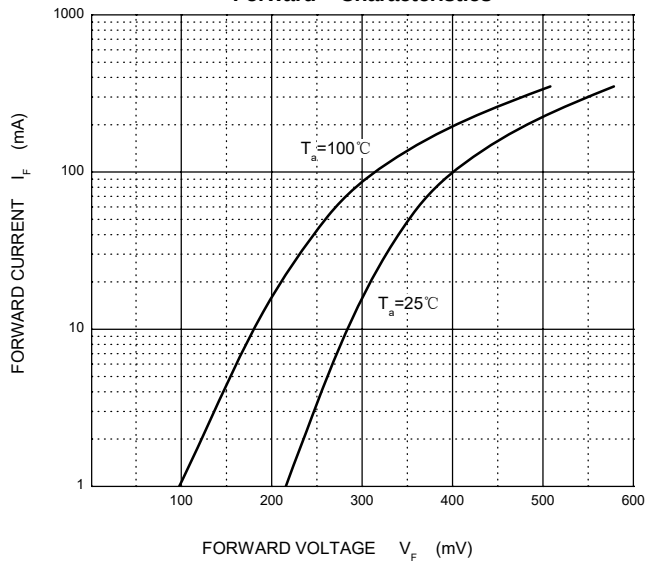
Notes: 1. Part mounted on FR-4 board with recommended pad layout

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

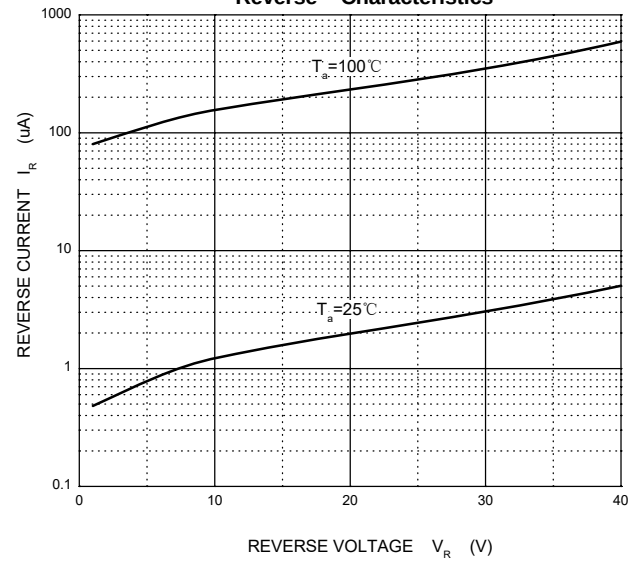
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	40			V
Forward Voltage Drop	V_{FM}	$I_F = 20mA$ $I_F = 200mA$			0.37 0.60	V
Peak Reverse Current	I_{RM}	$V_R = 30V$			5	μA
Total Capacitance	C_T	$V_R = 0V, f = 1.0MHz$		50		pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 200mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		10		ns

RATINGS AND CHARACTERISTIC CURVES

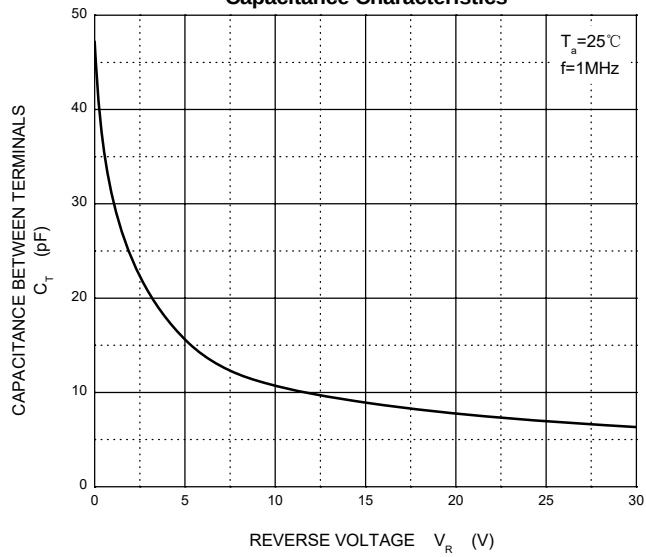
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

