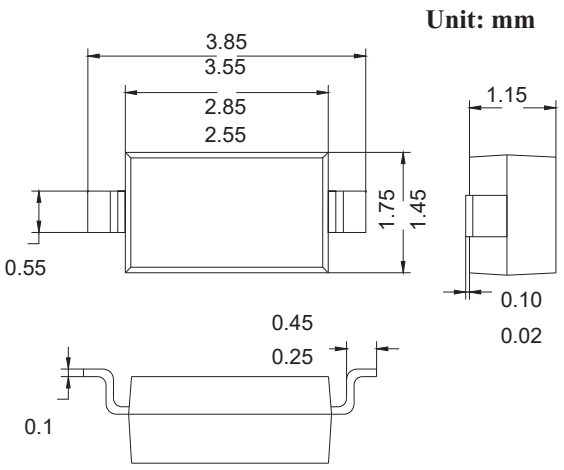
SOD-123 Small Signal Switching Diodes

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 ℃/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SOD-123 molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

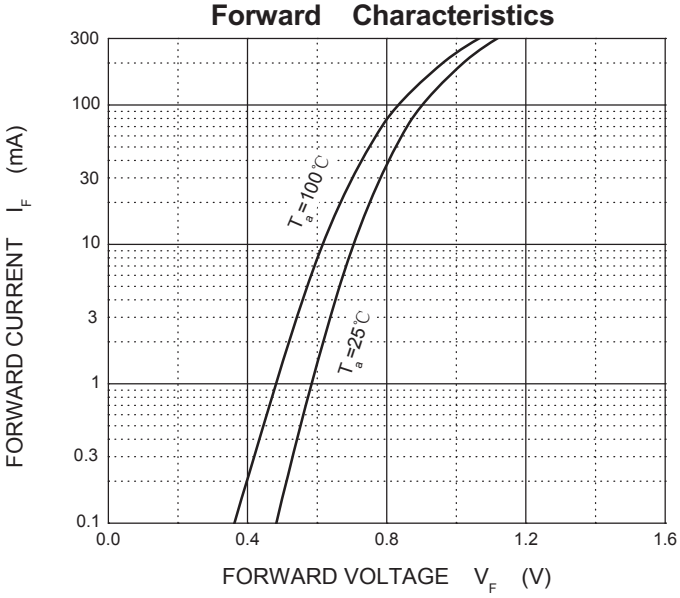
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Limit	Unit
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	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
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	Pd	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{STG}	-55~+150	℃

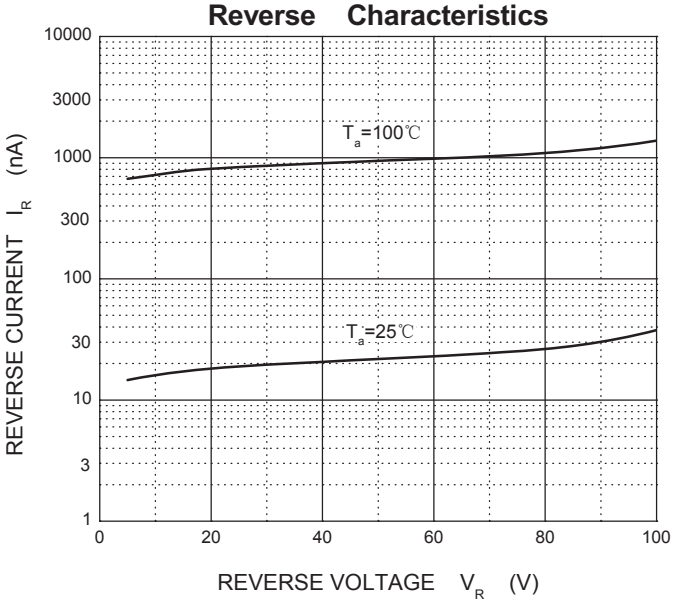
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75			V	I_R=10μA
Forward Voltage	V_{F1}	0.62		0.72	V	I_F=5mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1.0	V	I_F=100mA
	V_{F4}			1.25	V	I_F=150mA
Reverse Current	I_{R1}			2.5	μA	V_R=75V
	I_{R2}			25	nA	V_R=20V
Capacitance Between Terminals	C_T			4	pF	V_R=0V,f=1MHz
Reverse Recovery Time	t_{rr}			4	ns	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

RATINGS AND CHARACTERISTIC CURVES

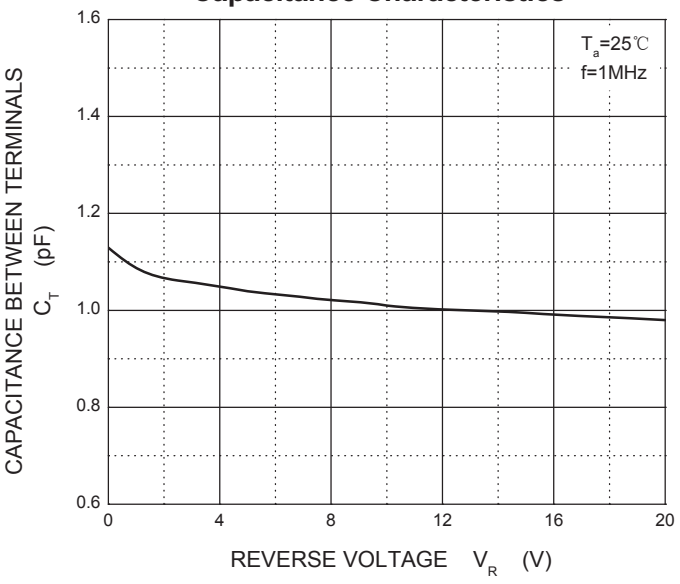
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve