

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low Forward Voltage Drop
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

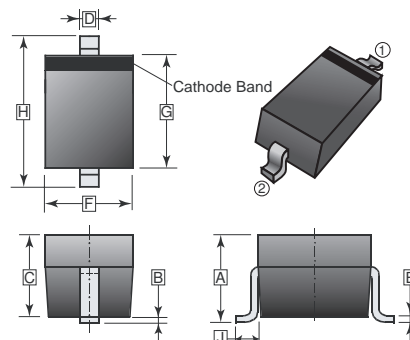
## MARKING CODE

S9

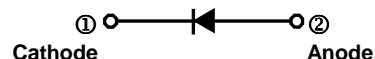
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7 inch

## SOD-123



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.35	F	1.40	1.80
B	0.10 REF.		G	2.55	2.85
C	1.05	1.15	H	3.55	3.85
D	0.30	0.78	J	0.50 REF.	
E	0.08	0.25			



## MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise specified.)

Parameter	Symbol	Rating	Unit
Peak repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
Working peak reverse voltage	V <sub>RWM</sub>	100	V
Average Rectifier Forward Current	I <sub>F(AV)</sub>	150	mA
Repetitive peak forward current <sup>1</sup> @ tp<1s, Duty Cycle<50%	I <sub>FRM</sub>	350	mA
Forward surge current <sup>1</sup> @ tp = 10ms	I <sub>FSM</sub>	750	mA
Power dissipation	P <sub>D</sub>	500	mW
Thermal resistance junction to ambient air	R <sub>θJA</sub>	200	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	125, -55~150	°C

Note:

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

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified.)

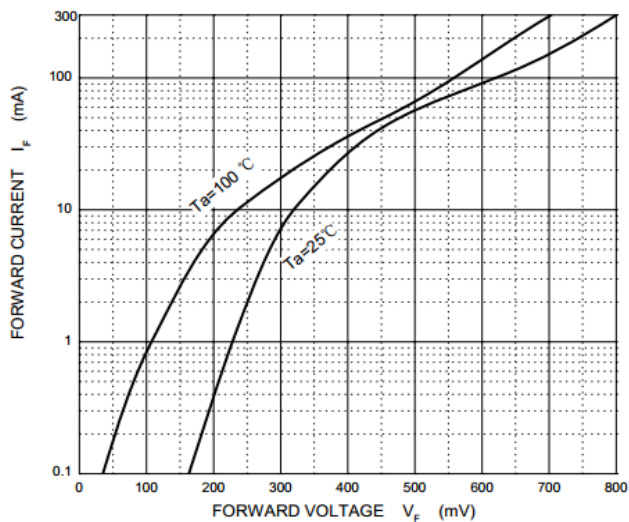
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Reverse breakdown voltage <sup>1</sup>	V <sub>R</sub>	100	-	-	V	I <sub>R</sub> =100μA
Maximum DC Reverse Current	I <sub>R</sub>	-	-	0.3	μA	V <sub>R</sub> =1.5V
		-	-	0.5		V <sub>R</sub> =10V
		-	-	1		V <sub>R</sub> =50V
		-	-	2		V <sub>R</sub> =75V
Maximum Instantaneous Forward Voltage <sup>1</sup>	V <sub>F</sub>	-	-	0.25	V	I <sub>F</sub> =0.1mA
		-	-	0.45		I <sub>F</sub> =10mA
		-	-	1		I <sub>F</sub> =250mA
Diode capacitance	C <sub>T</sub>	-	20	-	pF	V <sub>R</sub> =0, f=1MHz
		-	12	-		V <sub>R</sub> =1, f=1MHz

Note:

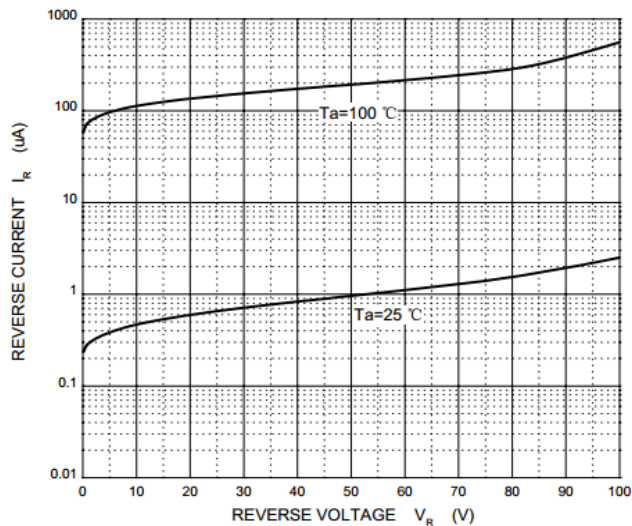
1. Short duration pulse test used to minimize self-heating effect.

**CHARACTERISTIC CURVES**

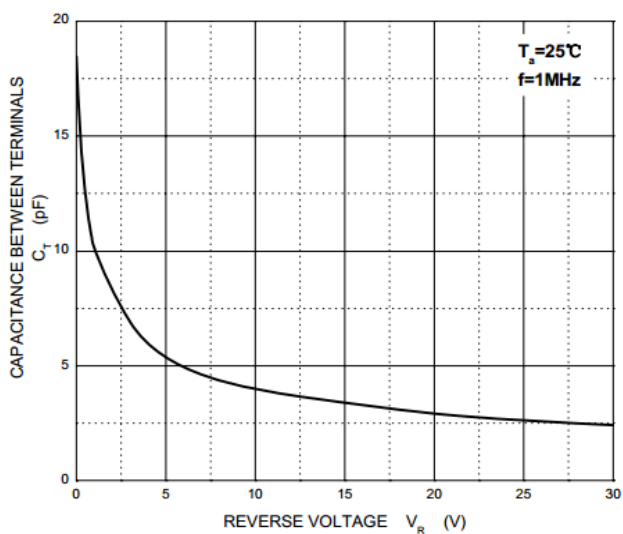
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

