

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

FEATURES

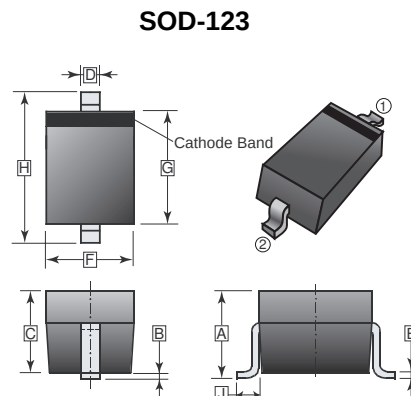
- Low Forward Voltage Drop
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

MARKING CODE

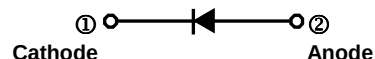
S9

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7 inch



REF.	Min.	Max.	REF.	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_A = 25°C unless otherwise specified.)

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

Note:

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

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified.)

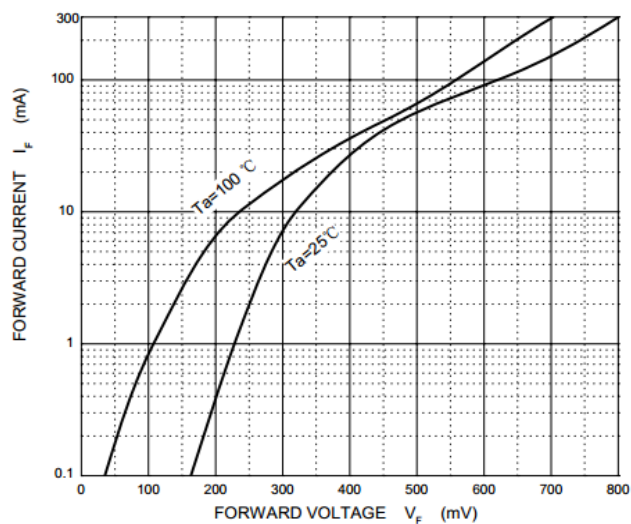
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Reverse breakdown voltage ¹	V _R	100	-	-	V	I _R =100μA
Maximum DC Reverse Current	I _R	-	-	0.3	μA	V _R =1.5V
		-	-	0.5		V _R =10V
		-	-	1		V _R =50V
		-	-	2		V _R =75V
Maximum Instantaneous Forward Voltage ¹	V _F	-	-	0.25	V	I _F =0.1mA
		-	-	0.45		I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

Note:

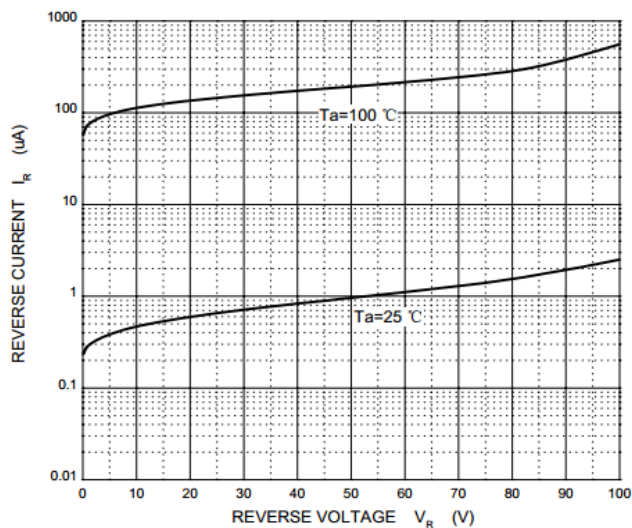
1. Short duration pulse test used to minimize self-heating effect.

CHARACTERISTIC CURVES

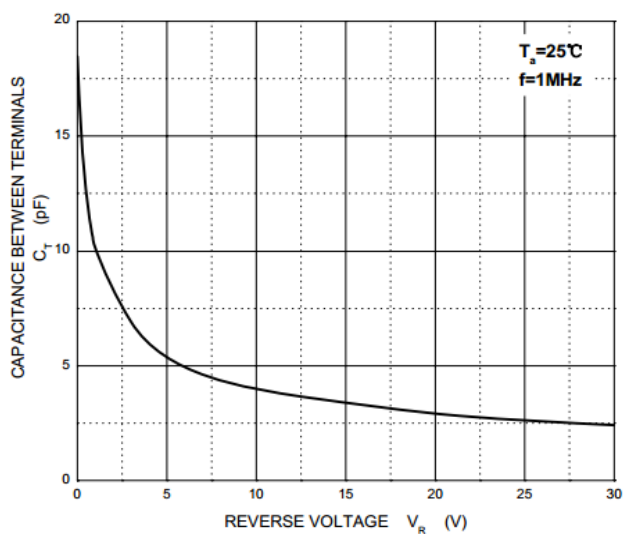
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

