

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

FEATUERS

- SOD-123 surface mount package
- High breakdown voltage
- Fast speed switching time

APPLICATIONS

- Surface mount fast switching diode

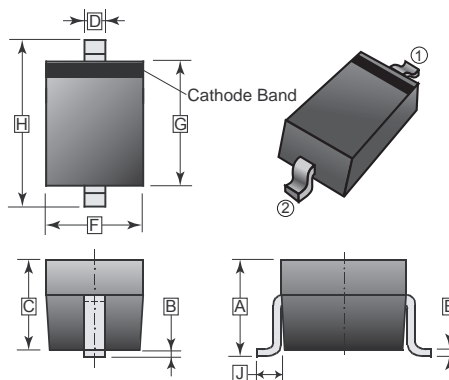
MARKING

5D

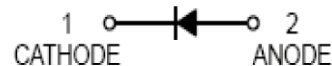
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7' inch

SOD-123



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05	1.25	F	1.50	1.70
B	0.10 REF.		G	2.60	2.80
C	1.05	1.15	H	3.55	3.85
D	0.45	0.65	J	0.50 REF.	
E	0.08	0.15			



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

Parameter	Symbol	Value	Unit
Continuous reverse Voltage	V_R	100	V
Forward continuous Current	I_F	200	mA
Peak Forward Surge Current	@t=1s	1.0	A
	@t=1ms	2.0	
Power Dissipation	P_D	425	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	290	$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ\text{C}$

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

Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	100	-	V	$I_R = 100\mu\text{A}$
Forward Voltage	V_F	-	1.0	V	$I_F = 10\text{mA}$
Reverse Current	I_R	-	25	nA	$V_R = 20\text{V}$
		-	5.0	μA	$V_R = 75\text{V}$
Diode Capacitance	C_D	-	4.0	pF	$V_R = 0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	4.0	ns	$I_F = 10\text{mA}, I_R = 10\text{mA}$

RATINGS AND CHARACTERISTIC CURVES ($T_A=25^\circ\text{C}$ unless otherwise specified)

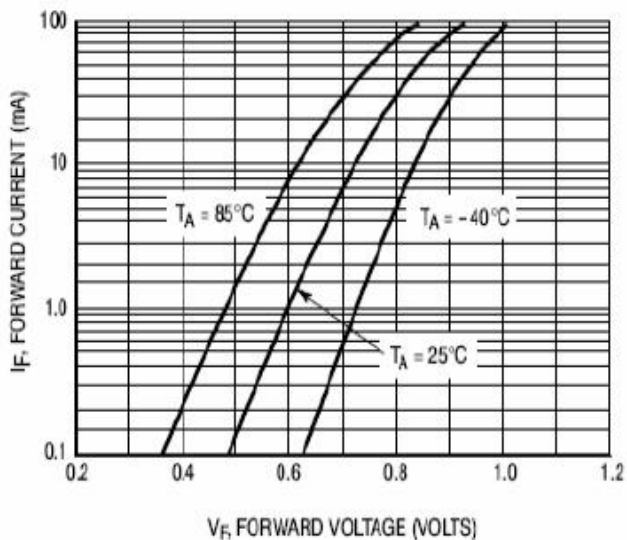


Figure 1. Forward Voltage

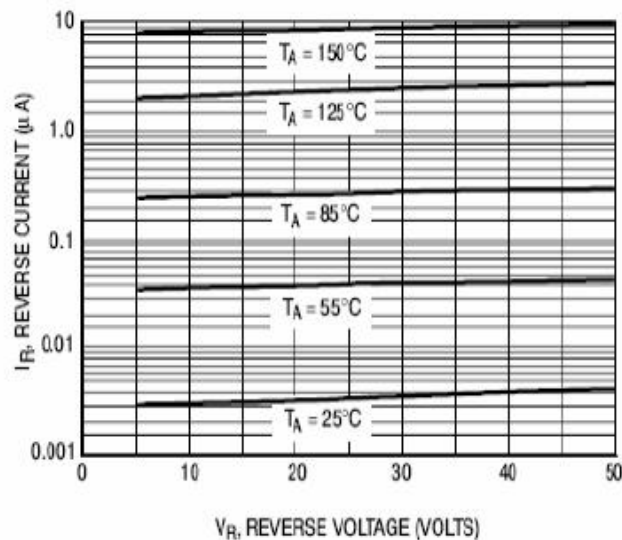


Figure 2. Leakage Current

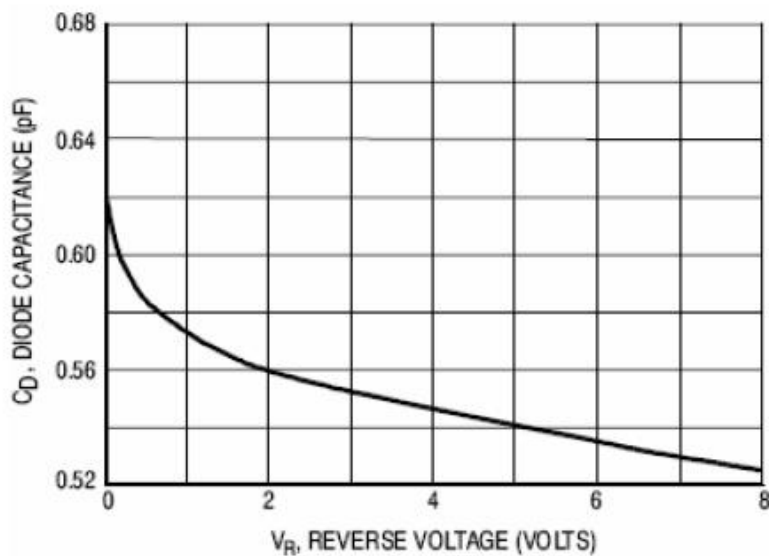


Figure 3. Capacitance