

**SURFACE MOUNT
FAST SWITCHING DIODE**

**REVERSE VOLTAGE – 100 Volts
FORWARD CURRENT – 0.15 Amperes**

FEATURES

- Fast switching speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOD-123 plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.), “Halogen-free”
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant
- Marking Code : T4
- Weight : 11.67m grams (Approximate)

SOD-123



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Non-repetitive peak reverse voltage	V_{RM}	100	V
Repetitive peak reverse voltage	V_{RRM}	100	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
Forward continuous current (Note 1)	I_{FM}	300	mA
Average rectified output current (Note 1)	I_O	150	mA
Non-repetitive peak forward current	I_{FSM}	@ $t = 1.0 \mu s$ 2	A
		@ $t = 1.0 s$ 1	
Repetitive peak forward current	I_{FRM}	300	mA
Power dissipation (Note 1)	P_D	357	mW
Operation and storage temperature range	T_J, T_{STG}	-65 to +150	°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MAX	UNIT
Forward voltage	$I_F = 1 \text{ mA}$	V_F	715	mV
	$I_F = 10 \text{ mA}$		855	
	$I_F = 50 \text{ mA}$		1000	
	$I_F = 150 \text{ mA}$		1250	
Reverse leakage current	$V_R = 75 \text{ V}$	I_R	2500	nA
	$V_R = 20 \text{ V}$		25	
Typical junction capacitance	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_D	2	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 1)	R_{thJA}	290	°C/W
	R_{thJC}	200	

DYNAMIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP.	UNIT
Reverse recovery time	$I_F = I_R = 10 \text{ mA},$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$	T_{RR}	4	ns

Note :

(1) Valid provided that terminals are kept at ambient temperature

REV. 14, JUL.-2015 KSYR01

Fig.1 - FORWARD CHARACTERISTICS

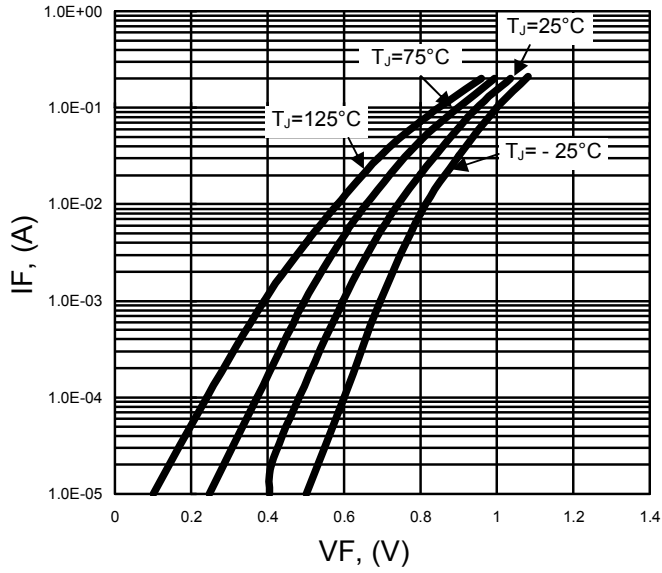


Fig. 2 - REVERSE CHARACTERISTICS

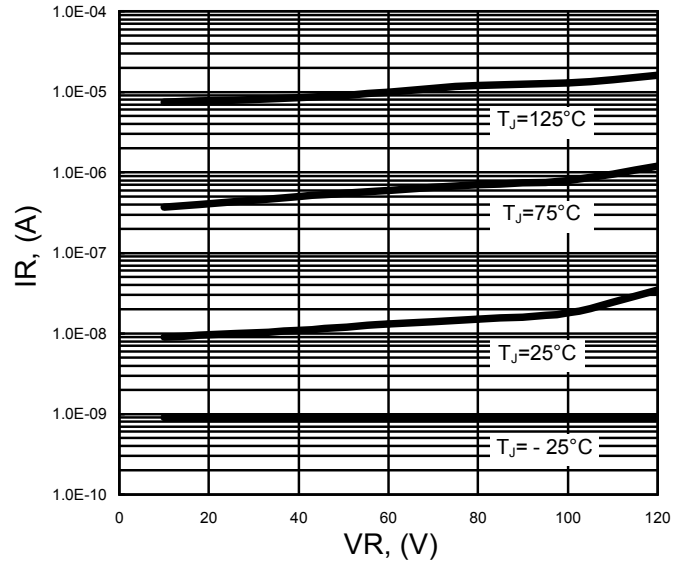
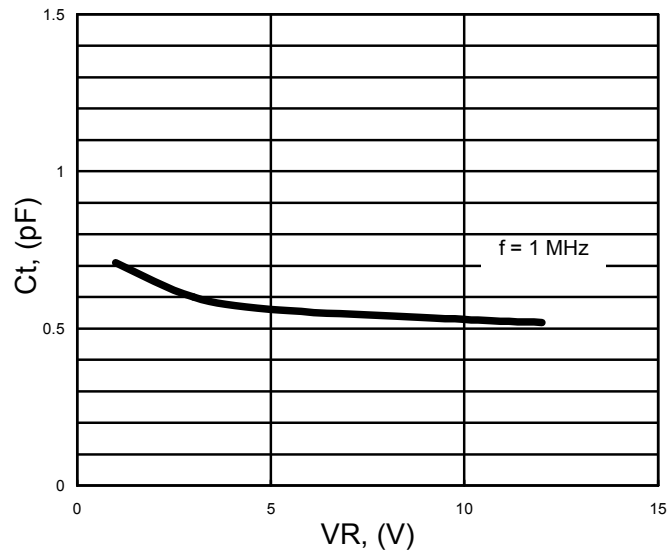
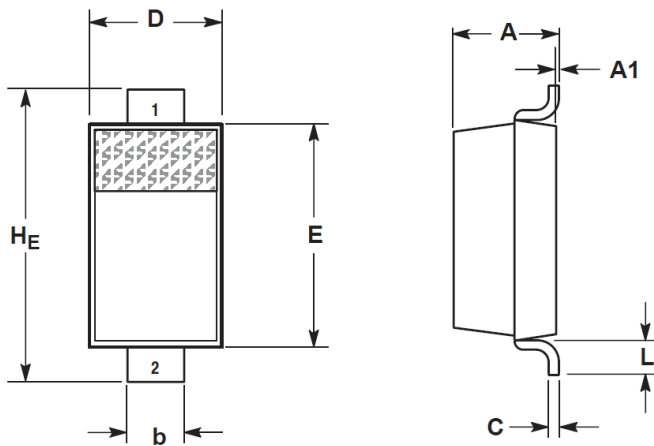


Fig.3 - CAPACITANCE



Package Dimensions :

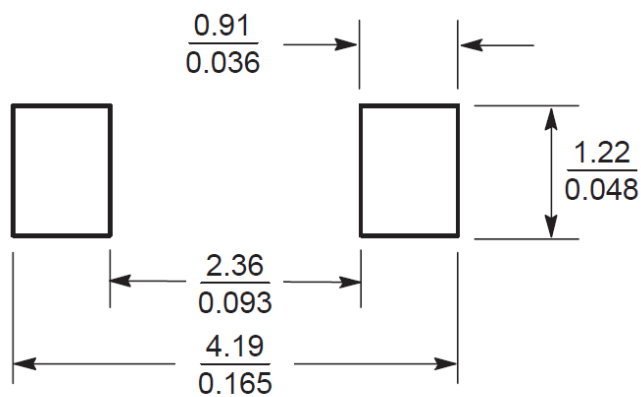
SOD-123



Dim.	INCHES		MILLIMETERS	
	Min.	Max.	Min.	Max.
A	0.037	0.053	0.94	1.35
A1	0.000	0.004	0.00	0.10
b	0.020	0.028	0.51	0.71
C	--	0.006	--	0.15
D	0.055	0.071	1.40	1.80
E	0.100	0.112	2.54	2.84
HE	0.140	0.152	3.56	3.86
L	0.010	--	0.25	--

Note:
PIN 1. Cathode
PIN 2. Anode

Soldering Pad Layout :



SCALE 10:1 $\left(\frac{\text{mm}}{\text{inches}} \right)$

Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Diodes - General Purpose, Power, Switching category:](#)

Click to view products by [Lite-On manufacturer:](#)

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [RGP30G-E373](#) [BAQ333-TR](#) [BAQ335-TR](#) [BAQ33-GS18](#) [BAS1602VH6327XT](#) [BAV17-TR](#) [BAV19-TR](#) [BAV301-TR](#) [BAW27-TAP](#) [NSVBAV23CLT1G](#) [NTE525](#) [1SS181-TP](#) [1SS184-TP](#) [1SS193,LF](#) [1SS193-TP](#) [1SS400CST2RA](#) [SBAV99LT3G](#) [SDAA13](#) [LL4448-GS18](#) [SHN2D02FUTW1T1G](#) [LS4150GS18](#) [LS4151GS08](#) [SMMBD7000LT3G](#) [1N4449](#) [1N4934-E3/73](#) [APT100DL60HJ](#) [RFUH20TB3S](#) [RGP30G-E354](#) [RGP30M-E3/73](#) [D291S45T](#) [MCL4151-TR](#) [BAS 16-02L E6327](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAS33-TAP](#) [BAS 70-02V H6327](#) [BAV300-TR](#) [BAV303-TR3](#) [BAW27-TR](#) [BAW56DWQ-7-F](#) [BAW56M3T5G](#) [BAW75-TAP](#) [BAW76-TR](#) [MM230L-CAA](#) [MMSD914-TP](#) [IDW40E65D1](#)