

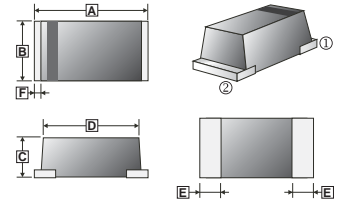
RoHS Compliant Product

A suffix of "-C" specifies halogen-free and RoHS Compliant

FEATURES

- Batch process design, excellent power dissipation offers Better reverse leakage current and thermal resistance.
- Guardring for overvoltage protection.
- Very tiny plastic SMD package.
- Super Low Forward Voltage
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500/228

SOD-323N



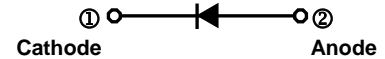
PACKAGING INFORMATION

- Epoxy: UL94-V0 rated flame retardant
- Case: Molded plastic, SOD323N
- Terminals: Plated terminals, solderable per MIL-STD-750, method 2026.

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.30	2.70	D	1.7	2.1
B	1.05	1.45	E	0.4 TYP	
C	0.80	1.20	F	0.30 TYP	

MARKING CODE

L4



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323N	3K	7 inch

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

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum Reverse Voltage@ $I_R=1\text{mA}$	V_R	40	V
Maximum Forward Rectified Current	I_O	1.5	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30	A
Typical Thermal Resistance	$R_{\theta JA}$	80	$^\circ\text{C/W}$
Storage and Operating Temperature Range	T_{STG}, T_J	-55~100, -65~175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	240	250	mV	$I_F=100\text{mA}$
		300	350		$I_F=500\text{mA}$
		430	450		$I_F=2\text{A}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	65	100	μA	$T_J=25^\circ\text{C}$
Typical Junction Capacitance ¹	C_J	130	-	pF	

Note:

1. $f=1\text{MHz}$ and applied 4V DC reverse voltage

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

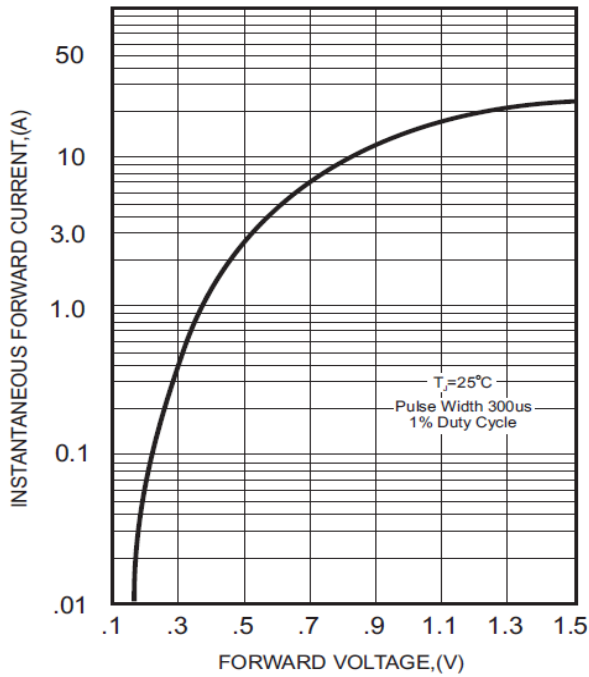


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

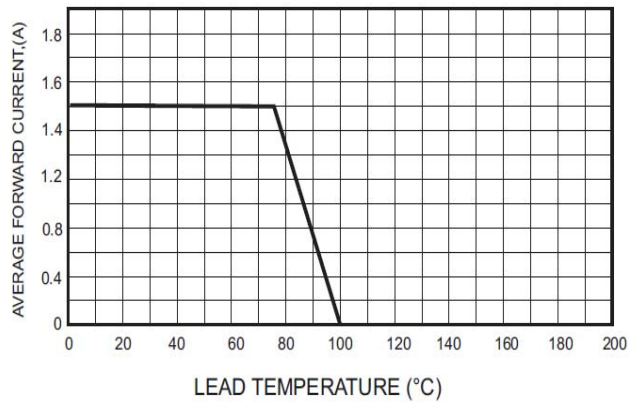


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

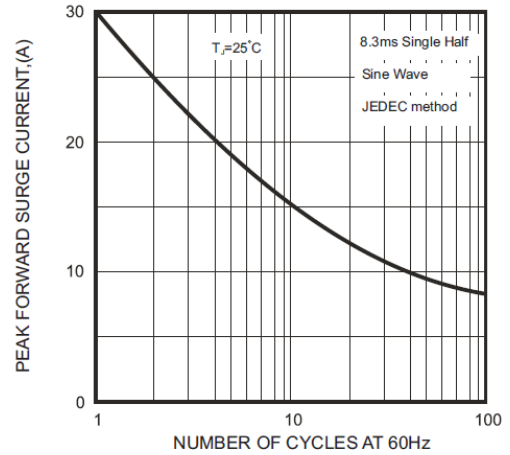


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

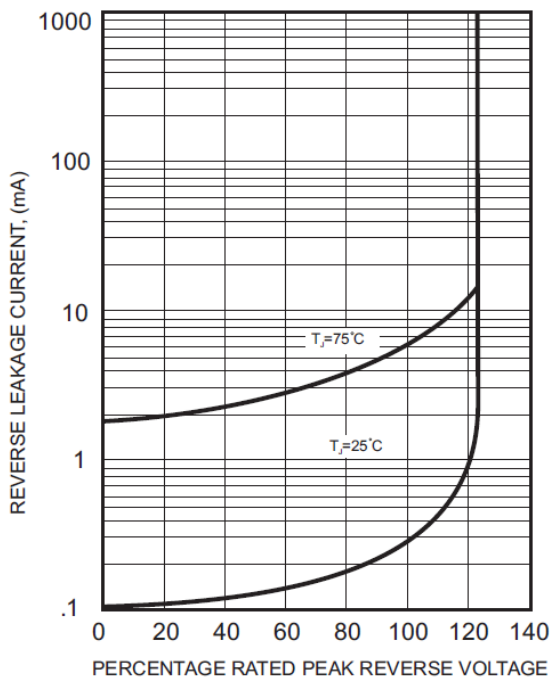


FIG.5-TYPICAL JUNCTION CAPACITANCE

