

DSS14LN

Schottky Barrier Diode

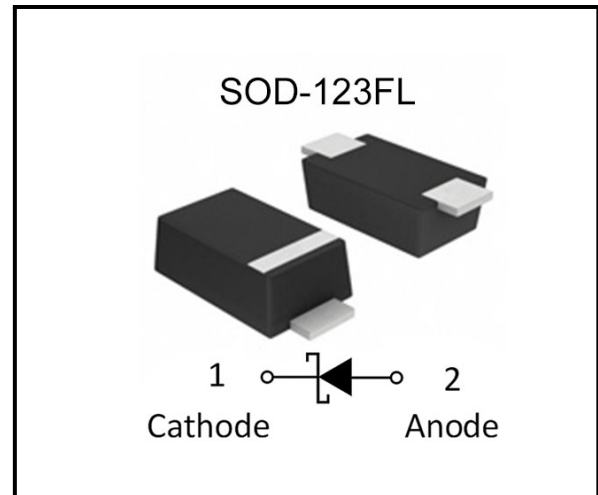
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

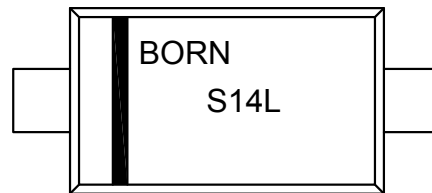
General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-123FL Plastic Package

Package



Marking



Ordering information

Order code	Package	Marking	Base qty	Delivery mode
DSS14LN	SOD-123FL	S14L	3K	Tape and reel

Maximum Ratings@T_A=25°C unless otherwise noted

Symbol	Parameters	Value	Unit
V _{RRM}	Repetitive peak reverse voltage	40	V
V _{RMS}	Maximum RMS voltage	28	V
V _{DC}	Maximum DC blocking voltage	40	V
I _{F(AV)}	Maximum average forward rectified current	1	A
I _{FSM}	Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	30	A
P _D	Power Dissipation	450	mW
R _{θJA}	Typical thermal resistance	222	°C/W
T _J	Operating junction temperature	-40 to +125	°C
T _{STG}	Storage temperature range	-55 to +150	°C



DSS14LN

Schottky Barrier Diode

Electrical Characteristics@ $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameters	Test conditions	Min	Typ	Max	Unit
V_F	Maximum forward voltage	$I_F=0.1\text{A}$		0.28	0.32	V
		$I_F=1.0\text{A}$		0.36	0.42	
I_R	Maximum reverse current	$V_R=40, T_A=25^{\circ}\text{C}$			220	μA
		$V_R=40, T_A=100^{\circ}\text{C}$		8.5		mA
C_J	Type junction capacitance	$V_R=4\text{V}, f=1\text{MHz}$		50		pF



DSS14LN

Schottky Barrier Diode

Typical Performance Characteristics ($T_J = 25^\circ\text{C}$, unless otherwise noted)

Figure 1: Forward Current Derating Curve

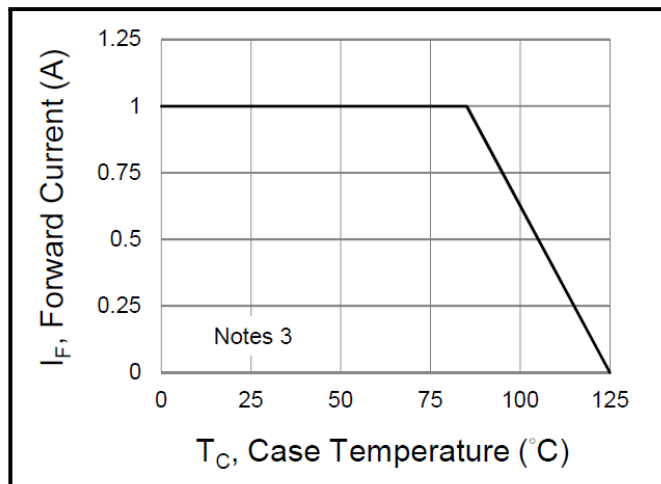


Figure 2: Reverse Characteristics

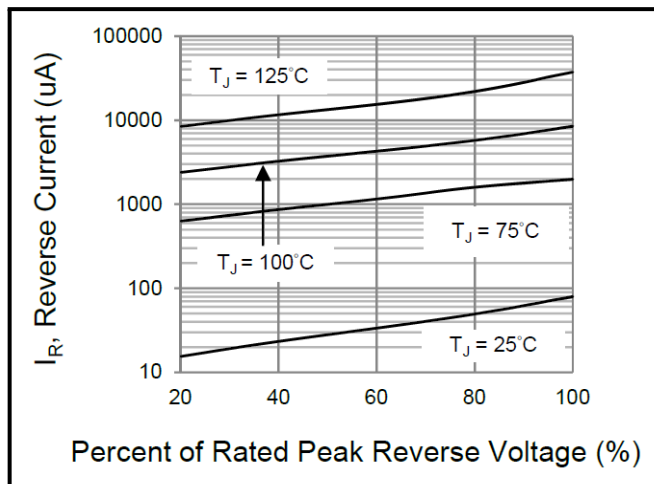


Figure 3: Capacitance Characteristics

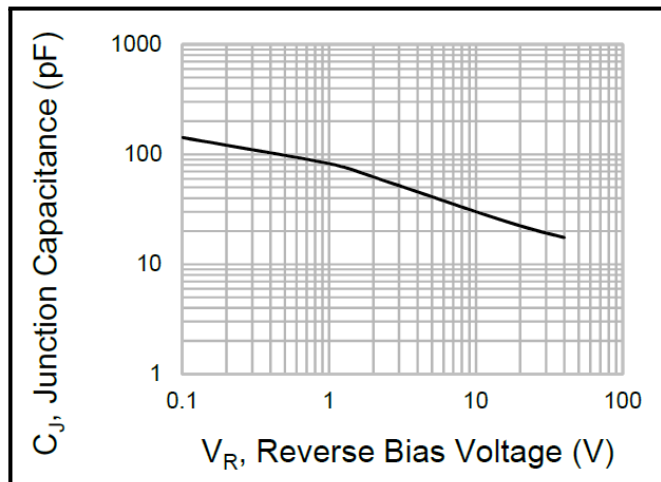
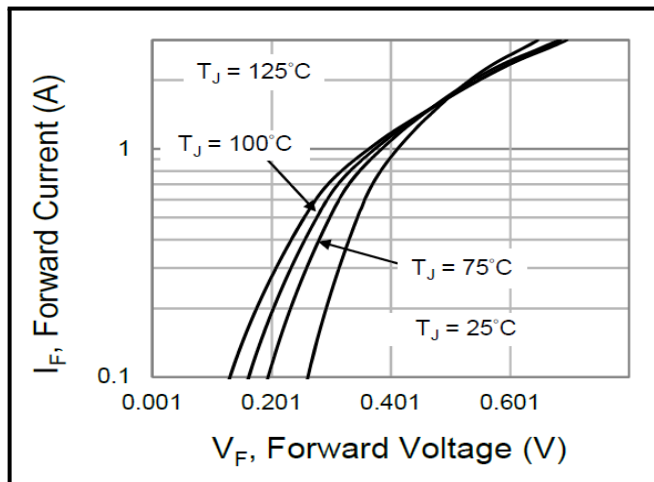


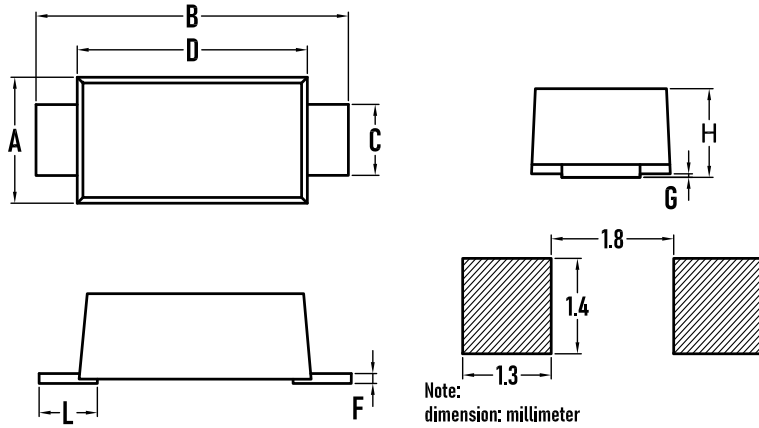
Figure 4: Forward Characteristics



DSS14LN

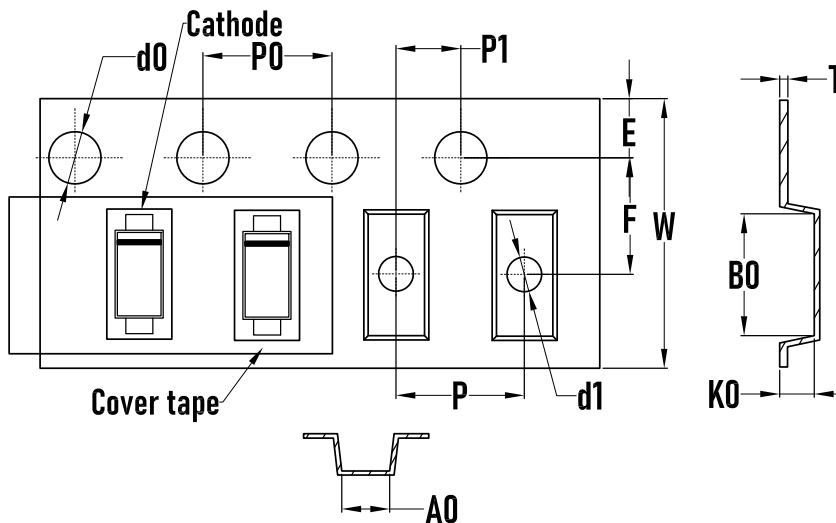
Schottky Barrier Diode

Package Mechanical Data - SOD-123FL



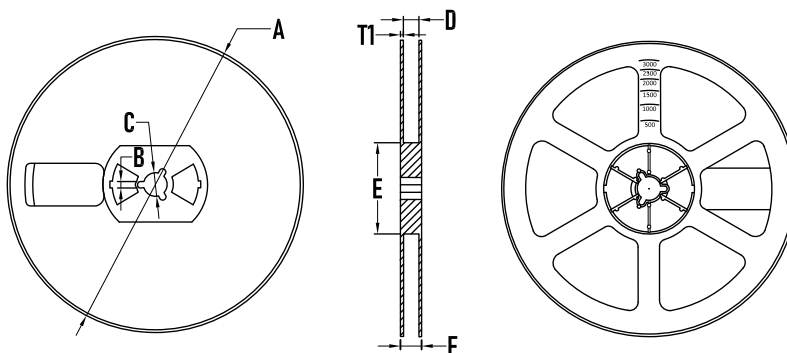
SYMBOL	MILLIMETER		
	MIN.	Typ.	MAX.
A	1.50	1.75	2.00
B	3.40	3.65	3.90
C	0.70	0.95	1.20
D	2.50	2.70	2.90
F	0.05	0.15	0.26
G	0.00	—	0.10
H	0.95	1.15	1.35
L	0.35	0.63	0.90

Packaging Tape - SOD-123FL



SYMBOL	MILLIMETER
A0	2.10±0.1
B0	4.0 ±0.1
d0	1.5±0.1
d1	1.0±0.1
E	1.75±0.1
F	3.50±0.1
K0	1.25±0.1
P	4.00±0.1
P0	4.00±0.1
P1	2.00±0.1
W	8.00±0.1
T	0.2±0.02

Packaging Reel



SYMBOL	MILLIMETER
A	177.8±0.2
B	2.7±0.2
C	13.5±0.2
D	9.6±0.3
E	54.5±0.2
F	12.3±0.3
T1	1.0±0.2
Quantity	3000PCS

