

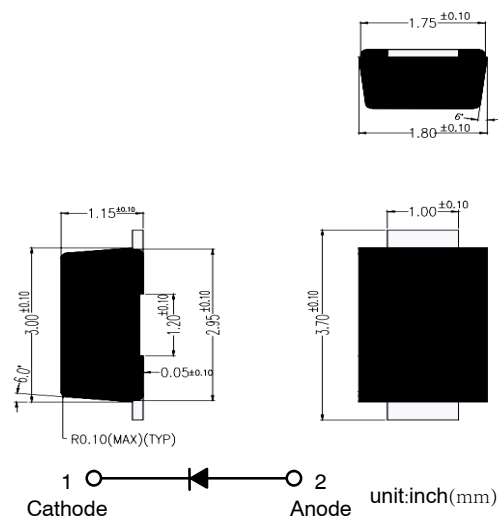
Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Compliant with RoHS standards, halogen-free
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- AEC-Q101 qualified

Mechanical Data

- Package: SOD-123FL
- Terminals: Tin plated leads, solderable per
- Polarity: Cathode line denotes the cathode end

SOD-123FL



Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	SL12FLQ	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	20	V
Maximum RMS Voltage	VRMS	14	V
Maximum DC Blocking Voltage	VDC	20	V
Maximum Average Forward Rectified current at T _L (See Fig.1)	IF(AV)	1	A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	IFSM	45	A
Operating Junction Temperature Range	TJ	- 55 to + 125	°C
Storage Temperature Range	TSTG	- 55 to + 125	°C



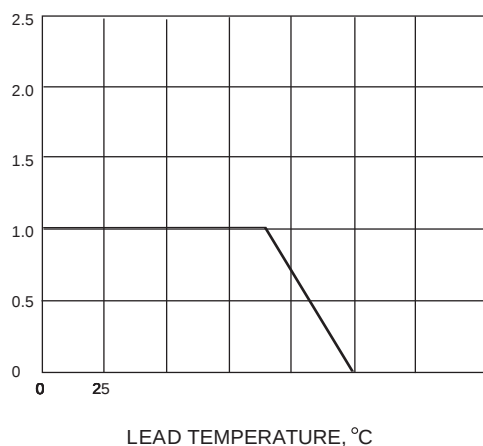
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	SL12FLQ	Unit
Maximum Instantaneous Forward Voltage	$I_F=1\text{A}$	VF	0.34	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}\text{C}$	IR	0.20	mA
Typical Junction Capacitance	4.0 V, 1 MHz	CJ	130	pF

Characteristics Curves

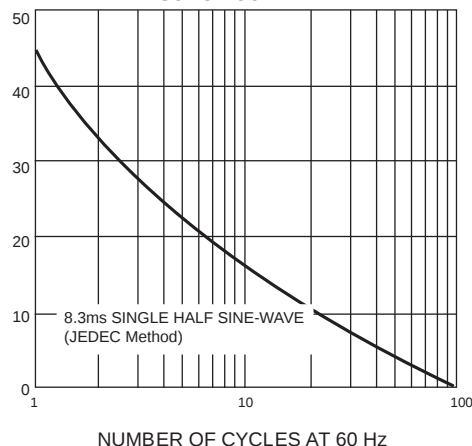
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



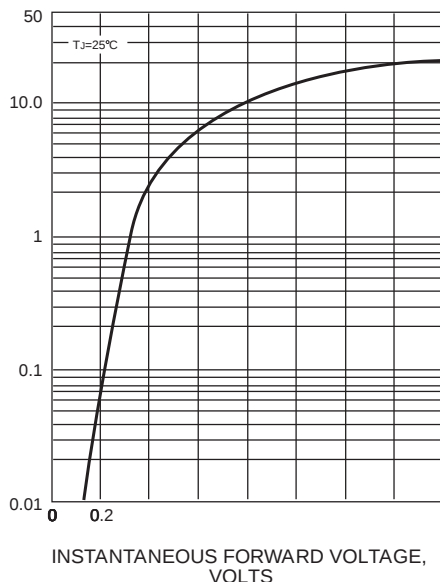
PEAK FORWARD SURGE CURRENT,
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD
CURRENT,AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

