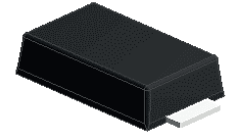


Features

- Low leakage current
- Schottky barrier rectifiers
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- Halogen-free according to IEC 61249-2-21 definition
- High temperature soldering guaranteed: 260°C/10 seconds



RoHS
COMPLIANT



SMAF

Applications

For use in low voltage, high frequency inverters, free-wheeling and polarity protection application.

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

Parameter	Symbol	LSL22	LSL23	LSL24	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	V
Maximum RMS Voltage	V _{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	V
Maximum Average Forward Rectified Current	I _{F(AV)}	2			A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	50			A
Typical Thermal Resistance, Junction to Ambient ¹	R _{θJA}	85			°C/W
Typical Thermal Resistance, Junction to Case ¹	R _{θJC}	15			°C/W
Typical Thermal Resistance, Junction to Lead ¹	R _{θJL}	18			°C/W
Operating Junction Temperature Range	T _J	-55 to +150			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Note:

1. Mounted on copper pad area of 0.2 x 0.2" (5.0 x 5.0mm) to each terminal.

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	LSL22	LSL23	LSL24	Unit
Maximum Forward Drop Voltage	V _F	I _F =2A	0.43			V
Maximum Reverse Leakage Current @ V _R	I _R	T _J =25°C	0.5			mA
		T _J =125°C	30			
Typical Junction Capacitance	C _J	V _R =4.0V, f=1MHz	160			pF

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

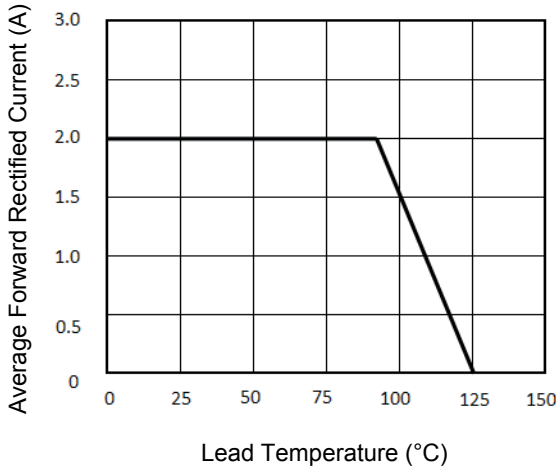


Figure 1. Forward Current Derating Curve

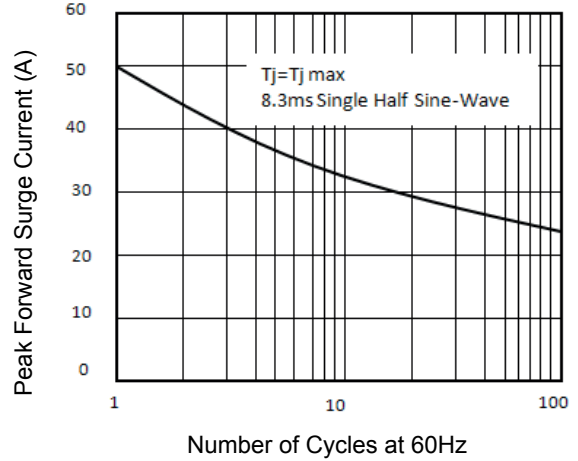


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

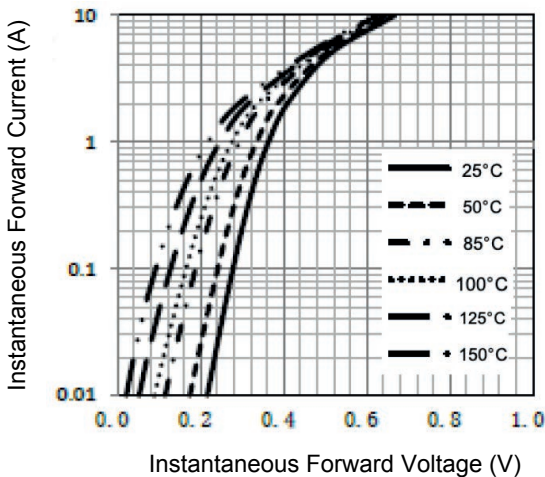


Figure 3. Typical Instantaneous Forward Characteristics

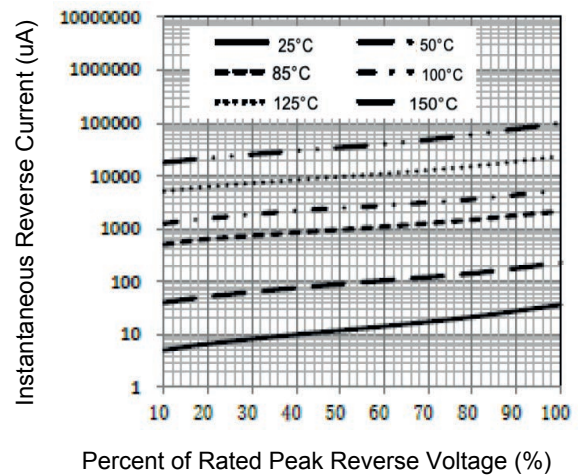


Figure 4. Typical Reverse Characteristics

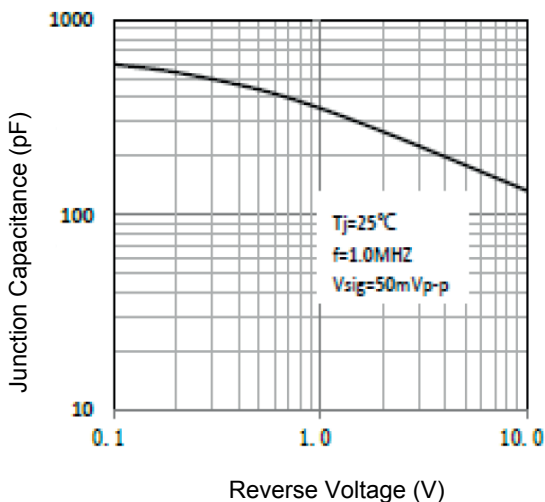
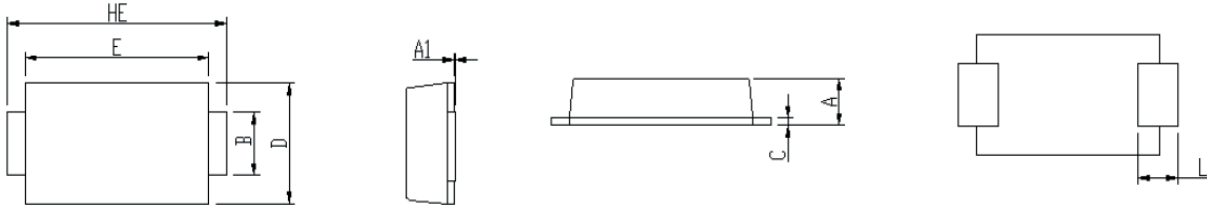


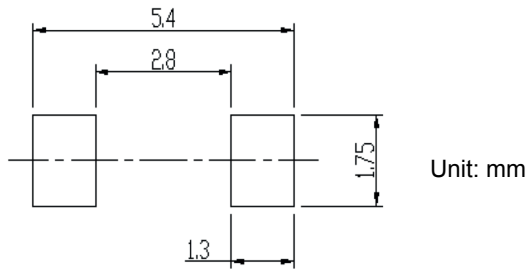
Figure 5. Typical Junction Capacitance

Package Outline Dimensions (SMAF)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.92	1.08	0.036	0.043
A1	0.00	0.10	0.000	0.004
B	1.25	1.45	0.049	0.057
C	0.10	0.25	0.004	0.010
D	2.60	2.80	0.102	0.110
E	4.10	4.30	0.161	0.169
L	0.70	1.10	0.028	0.043
HE	4.80	5.20	0.189	0.205

Recommended Pad Layout



Order Information

Device	Package	Marking	Packaging	SPQ
LSL22	SMAF	LSL22	Tape & Reel	3,000 Pcs / Reel
LSL23	SMAF	LSL23	Tape & Reel	3,000 Pcs / Reel
LSL24	SMAF	LSL24	Tape & Reel	3,000 Pcs / Reel