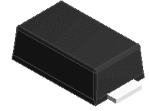


Features

- Low leakage current
- Schottky barrier rectifier
- 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 (DO-221AC)

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	LSL5B	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _{DC}	100	V
Maximum Average Forward Rectified Current	I _{F(AV)}	5	A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	80	A
Typical Thermal Resistance, Junction to Ambient	R _{θJA}	85	°C/W
Typical Thermal Resistance, Junction to Case	R _{θJC}	15	°C/W
Typical Thermal Resistance, Junction to Lead	R _{θJL}	18	°C/W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

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

Parameter	Symbol	Test Conditions	Typ	Max	Unit
Forward Drop Voltage	V _F	I _F =3A, T _A =25°C	0.48	0.54	V
		I _F =5A, T _A =25°C	0.54	0.58	
		I _F =5A, T _A =125°C	0.50	0.54	
Reverse Leakage Current @ V _R	I _R	T _J =25°C	10.99	50	uA
		T _J =100°C	1.80	10	mA
Typical Junction Capacitance	C _J	4.0V, 1MHZ	673		pF

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

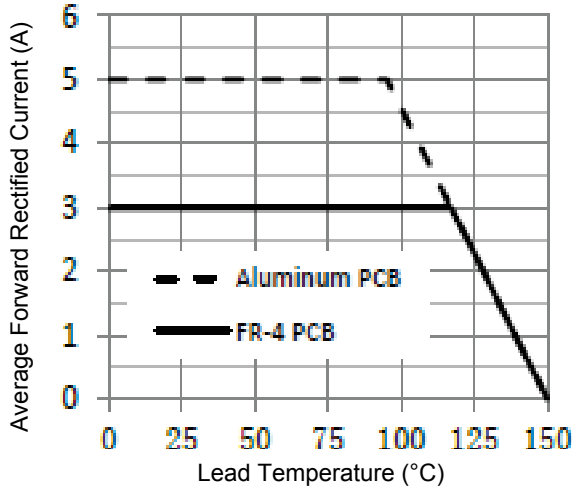


Figure 1. Forward Current Derating Curve

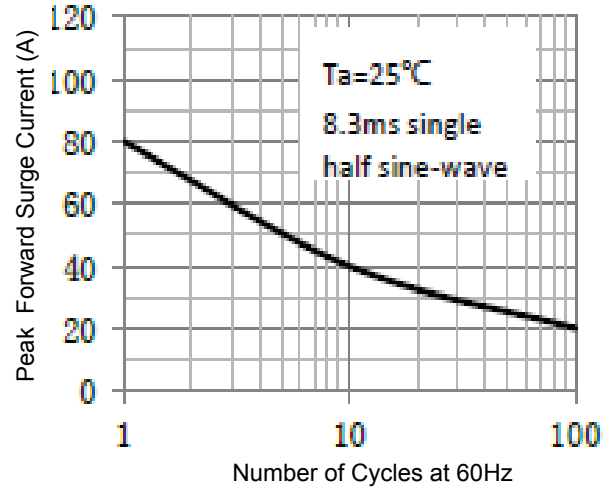


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

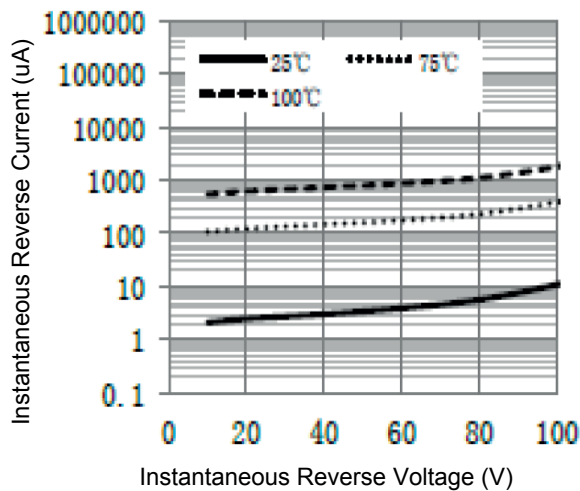


Figure 3. Typical Reverse Characteristics

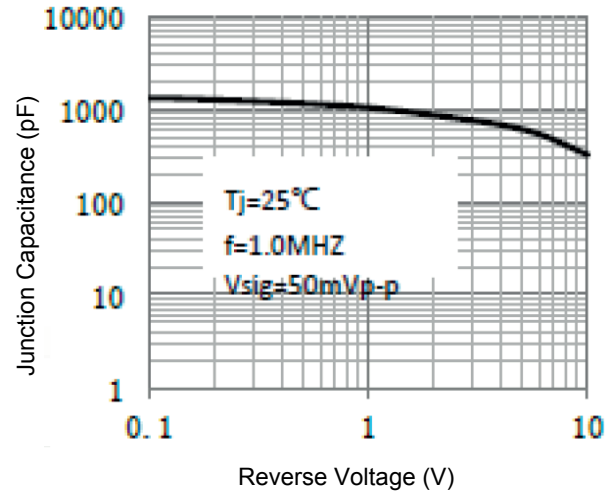


Figure 4. Typical Junction Capacitance

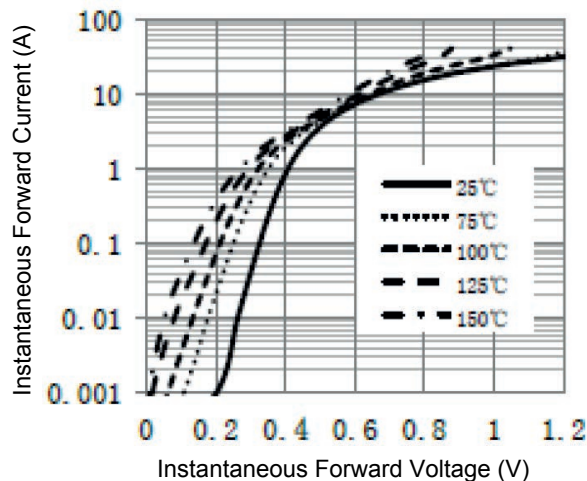
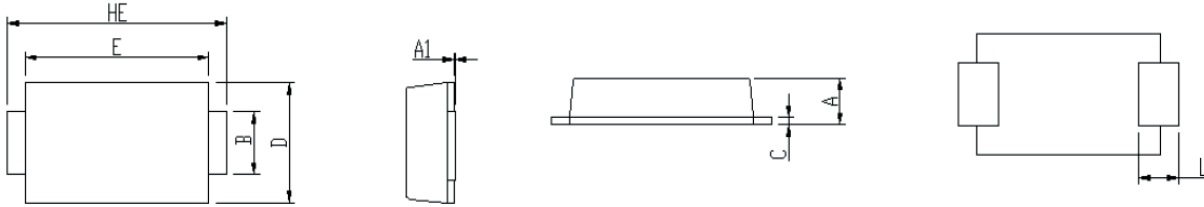


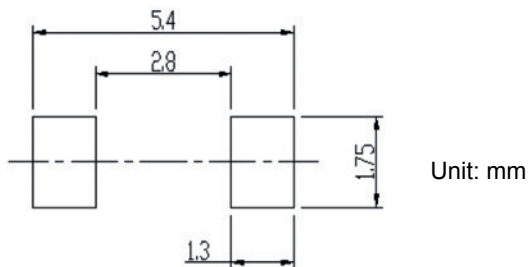
Figure 5. Typical Instantaneous Forward Characteristics

Package Outline Dimensions SMAF (DO-221AC)



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	Carrier	Quantity
LSL5B	SMAF (DO-221AC)	LSL5B	Tape & Reel	10,000 Pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com