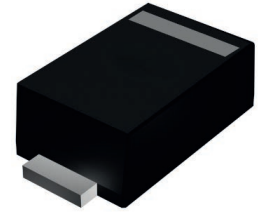


GSK3E45L thru GSK3E60L

Surface Mount Schottky Rectifiers
 Reverse Voltage 45V to 65V Forward Current 3A

Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C



SOD-123FL

Mechanical Data

- Package: SOD-123FL
- Molding compound meets UL 94V-0 flammability rating
- Terminals: Tin plated leads, solderable per J-STD-002
- Polarity: Cathode line denotes the cathode end

Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	GSK3E45L	GSK3E60L	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	45	65	V
Average Rectified Output Current @ 60Hz Sine Wave, Resistance Load, T _L (FIG.1)	I _O	3.0		A
Surge (Non-Repetitive) Forward Current @ 60Hz Half-Sine Wave, 1 Cycle, T _A =25°C	I _{FSM}	80		A
Thermal Resistance, Junction to Ambient ¹	R _{θJA}	70		°C/W
Thermal Resistance, Junction to Lead ¹	R _{θJL}	20		°C/W
Storage Temperature Range	T _{STG}	-55 to +150		°C
Junction Temperature Range	T _J	-55 to +150		°C

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

Parameter	Symbol	Condition	GSK3E45L	GSK3E60L	Unit
Maximum Instantaneous Forward Voltage Drop	V _F	I _{FM} =3.0A	0.46	0.50	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ V _{RM} =V _{RRM}	I _{RRM}	T _A =25°C	0.50	0.50	mA

Note:

1. Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm x 3mm copper pad areas.

Typical Characteristics Curves

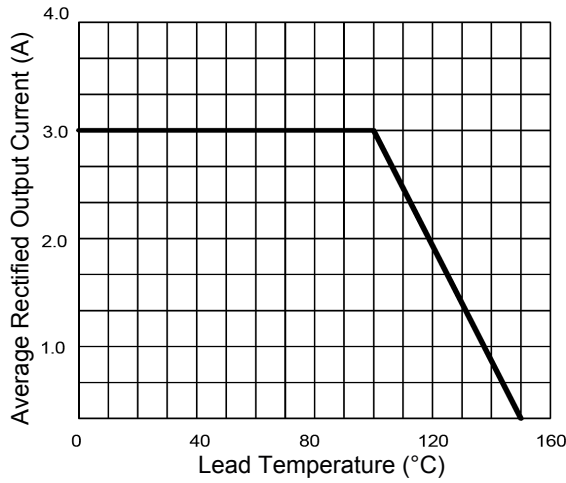


Figure 1. I_o - T_L Curve

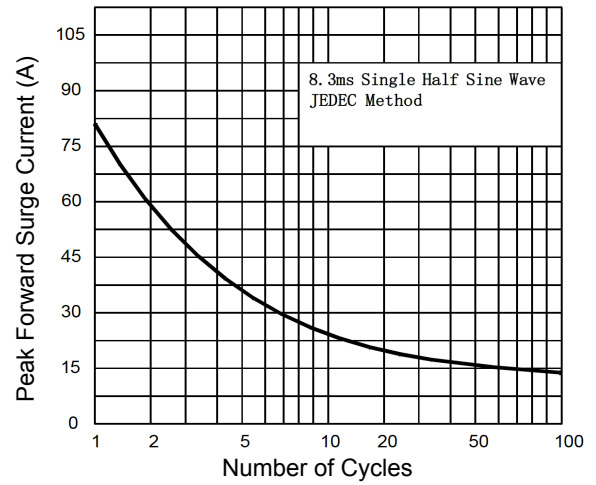


Figure 2. Surge Forward Current Capability

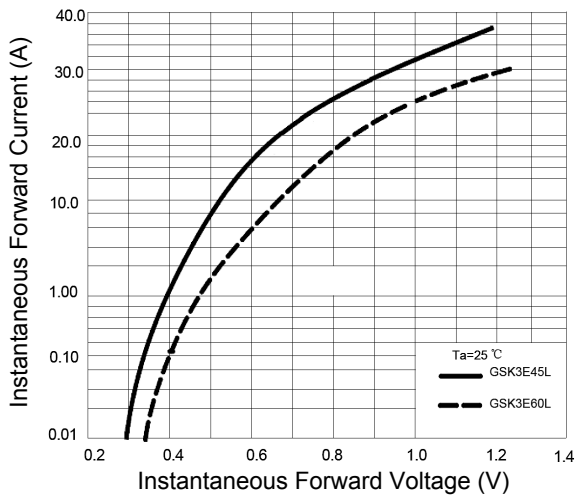


Figure 3. Forward Voltage

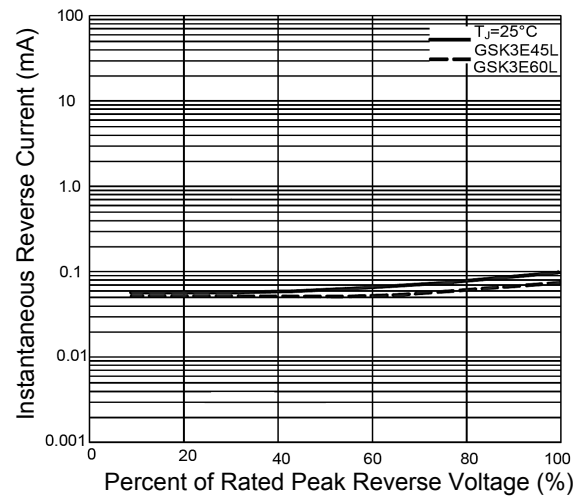
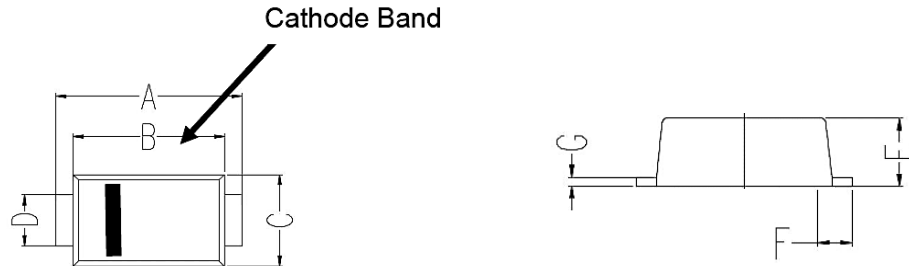


Figure 4. Typical Reverse Characteristics

GSK3E45L thru GSK3E60L

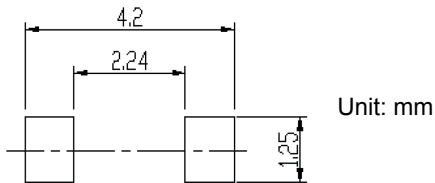
Surface Mount Schottky Rectifiers
 Reverse Voltage 45V to 65V Forward Current 3A

Package Outline Dimensions (SOD-123FL)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.50	3.90	0.138	0.154
B	2.90	3.10	0.114	0.122
C	1.70	2.00	0.067	0.079
D	0.85	1.05	0.033	0.041
E	0.88	1.08	0.035	0.043
F	0.43	0.83	0.017	0.033
G	0.10	0.25	0.004	0.010

Recommended Pad Layout



Order Information

Device	Package	Marking	Packaging	SPQ
GSK3E45L	SOD-123FL	3E45	Tape & Reel	3,000 Pcs / Reel
GSK3E60L	SOD-123FL	3E60	Tape & Reel	3,000 Pcs / Reel