1 Amp Schottky Rectifier

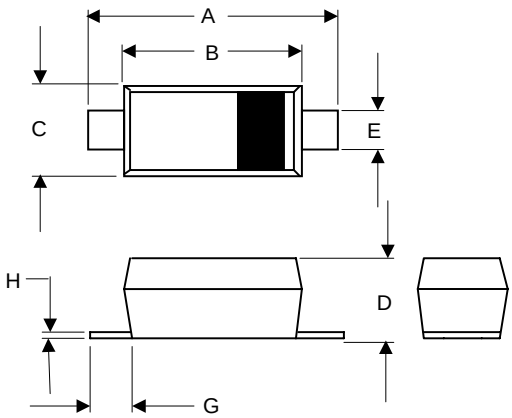
Features:

- Schottky Barrier Rectifier
- High Current Capability
- Low Forward Voltage
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings:

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 26°C/W Junction To Lead

SOD-123FL



Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KWSMD15PL	K15	50V	35V	50V
KWSMD16PL	K16	60V	42V	60V
KWSMD18PL	K18	80V	56V	80V
KWSMD110PL	K110	100V	70V	100V
KWSMD115PL	K115	150V	105V	150V
KWSMD120PL	K120	200V	140V	200V

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	----	.20	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_L = 90°C
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage KWSMD15PL-16PL KWSMD18PL-115PL KWSMD120PL	V_F	.65V .80V .85V	I_{FM} = 1.0A; T_J = 25°C(Note:2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.2mA 5mA	T_A = 25°C T_A = 100°C
Typical Junction Capacitance KWSMD15PL -16PL KWSMD18PL-120PL	C_J	110pF 30pF	Measured at 1.0MHz, V_R=4.0V

Note:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.
2.Pulse test: Pulse width 300 sec, Duty cycle 2%

SUGGESTED SOLDER PAD LAYOUT

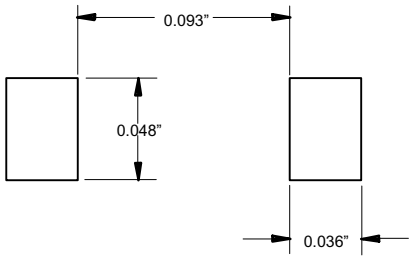
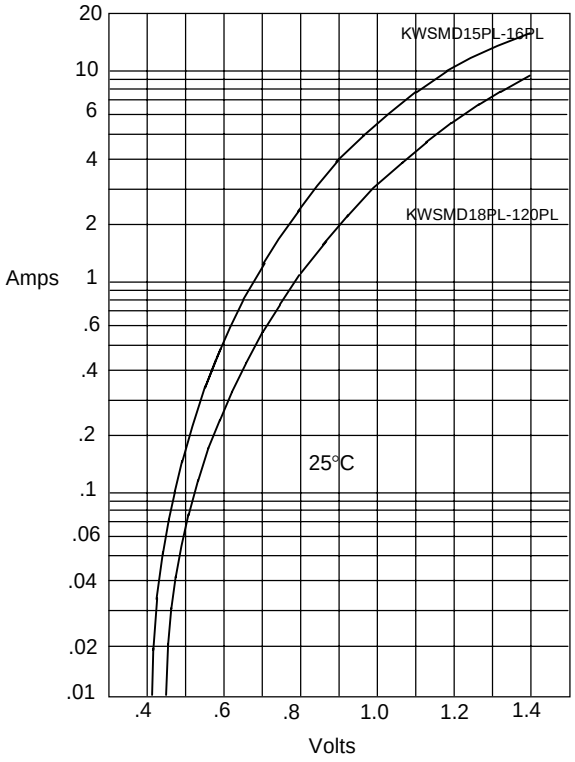
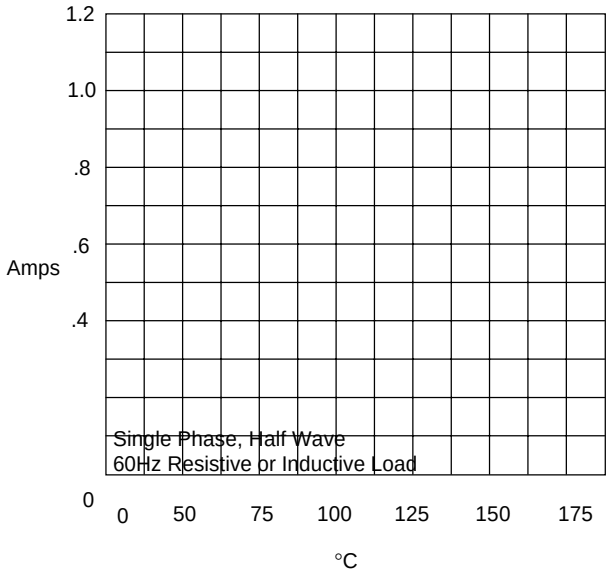


Figure 1
Typical Forward Characteristics



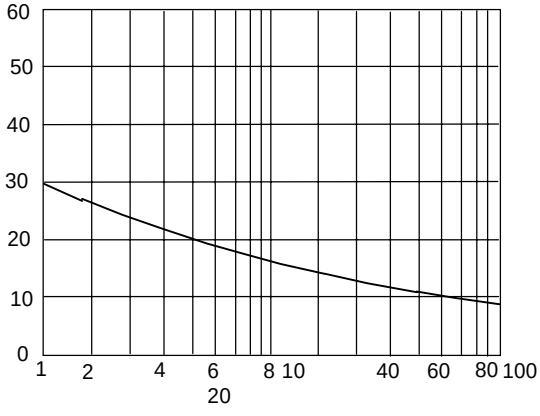
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Lead Temperature -°C

Figure 3
Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles