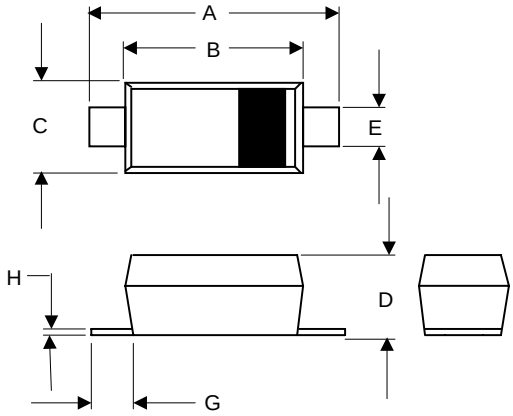
1 Amp Schottky Rectifier

Features:

- Schottky Barrier Rectifier
- High Current Capability
- Low Forward Voltage
- Lead Free Finish/RoHS Compliant(Note 1)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

SOD-123FL



Maximum Ratings:

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR150S	K15/T5	50V	35V	50V
MBR160S	K16/T6	60V	42V	60V
MBR180S	K18/T8	80V	56V	80V
MBR1100S	K110/TA	100V	70V	100V
MBR1150S	K115	150V	105V	150V
MBR1200S	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 MBR150S-160S MBR180S-1150S MBR1200S	V_F	.70V .85V .95V	I_{FM} = 1.0A; T_J = 25°C(Note:2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	T_A = 25°C T_A = 100°C
Typical Junction Capacitance MBR120S-160S MBR180S-1150S	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

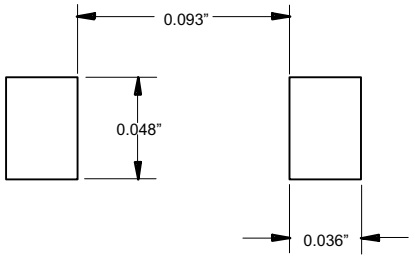
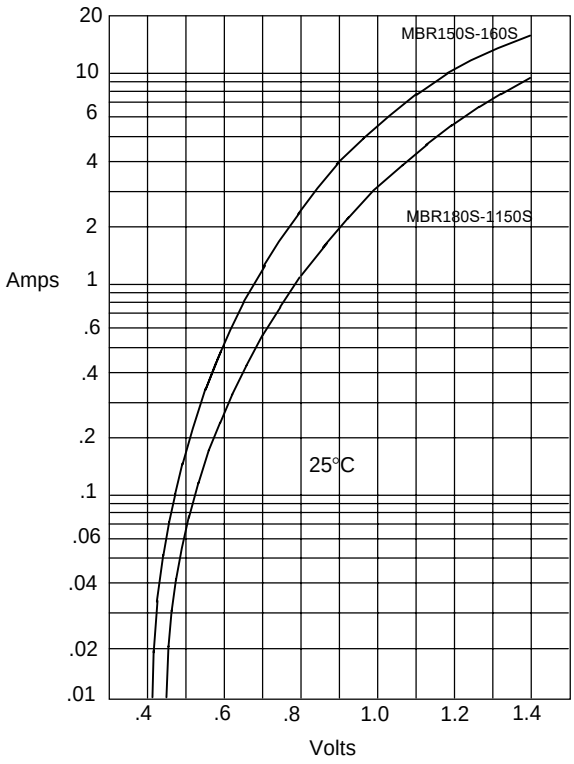
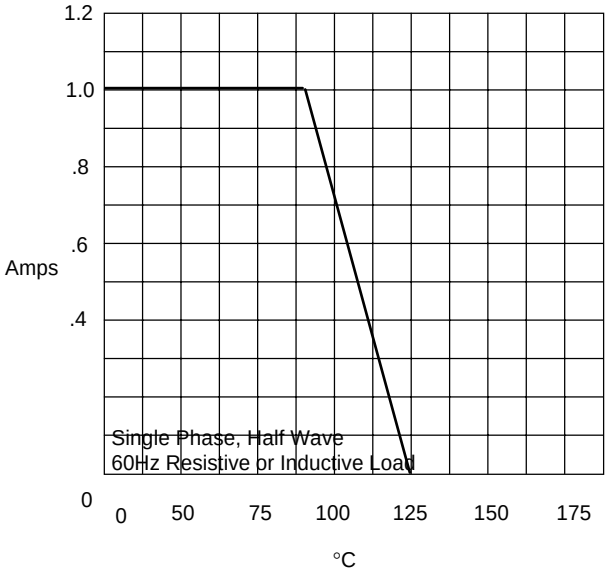


Figure 1
Typical Forward Characteristics



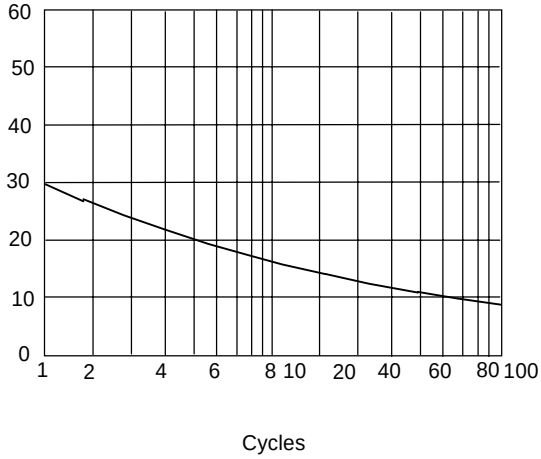
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

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

Reel Taping Specifications For Surface Mount Devices-SOD-123FL

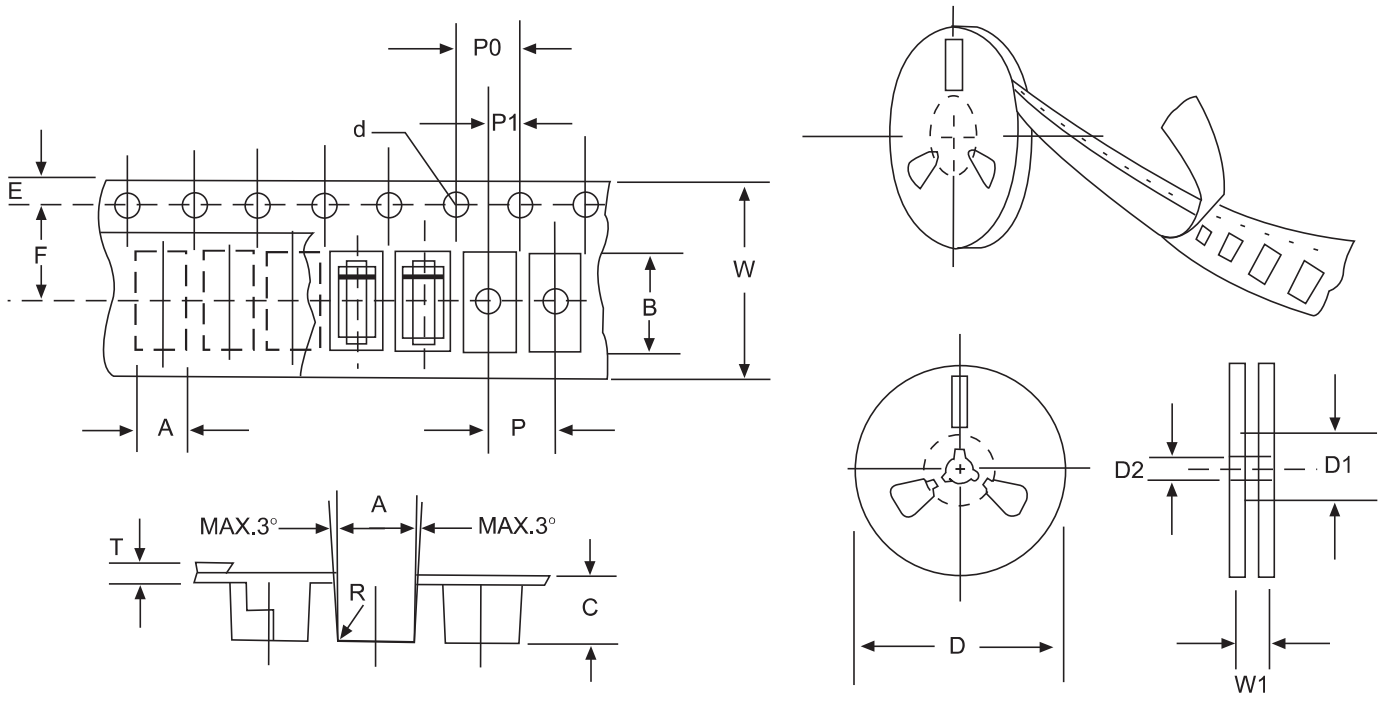


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SOD-123FLmm(inch)
Carrier width	A	2.05±0.1(0.081±0.004)
Carrier length	B	3.95±0.1(0.156±0.004)
Carrier depth	C	1.45±0.1(0.057±0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	178±2.0(7.0±0.079)
Reel inner diameter	D1	54±1.0(2.13±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Stroket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	3.50±0.1(0.138±0.002)
Punch hole pitch	P	4.0±0.1(0.157±0.004)
Sprocket hole pitch	P0	4.0±0.1(0.157±0.004)
Embossment center	P1	2.0±0.1(0.079±0.004)
Totall tape thickness	T	0.21±0.25(0.008±0.010)
Tape width	W	8.0±0.2(0.315±0.008)
Reel width	W1	10.0±2.0(0.394±0.079)

NOTE:Devices are packed in accordance with EIA standard RS-481-A and specification given above.

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	