

## Features

- Schottky Barrier Rectifier
- High Current Capability
- Low Forward Voltage
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Junction Temperature Range(32PL-34PL): -55°C to +125°C
- Operating Junction Temperature Range(36PL-320PL):-55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 20°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD32PL	SM32	20V	14V	20V
SMD34PL	SM34	40V	28V	40V
SMD36PL	SM36	60V	42V	60V
SMD38PL	SM38	80V	56V	80V
SMD310PL	SM310	100V	70V	100V
SMD315PL	SM315	150V	105V	150V
SMD320PL	SM320	200V	200V	200V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

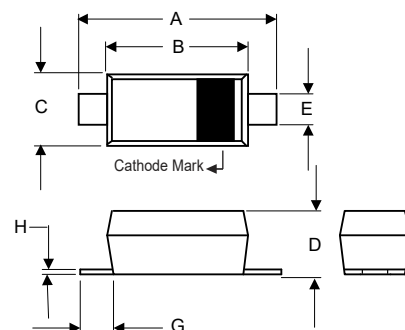
Average Forward Current	$I_{F(AV)}$	3.0A	See Fig 1
Peak Forward Surge Current	$I_{FSM}$	80A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$		
SMD32PL~34PL		0.50V	$I_{FM}=3.0A;$ $T_J=25^\circ C$
SMD36PL		0.65V	
SMD38PL-310PL		0.85V	
SMD315PL-320PL		0.90V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1mA 10mA	$T_J=25^\circ C$ $T_J=100^\circ C$
Typical Junction Capacitance	$C_J$		
SMD32PL~34PL		140pF	Measured at 1.0MHz VR=4.0V $T_J=25^\circ C$
SMD36PL		130pF	
SMD38PL-310PL		95pF	
SMD315PL-320PL		65pF	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

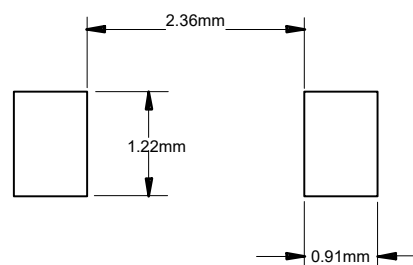
# 3 Amp Schottky Rectifier 20 to 200 Volts

## SOD-123FL



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

## Suggested Solder Pad Layout



**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

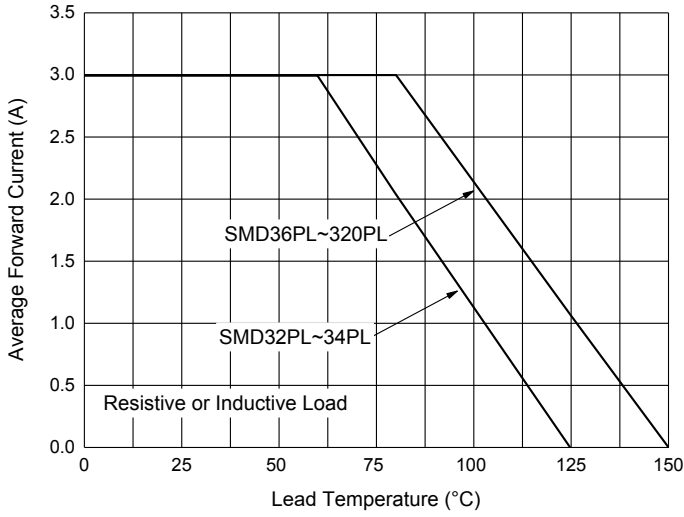


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

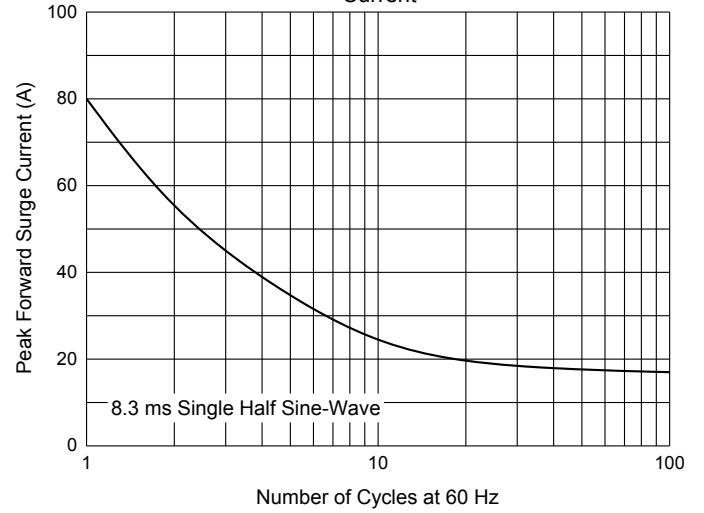


Fig. 3 - Typical Instantaneous Forward Characteristics

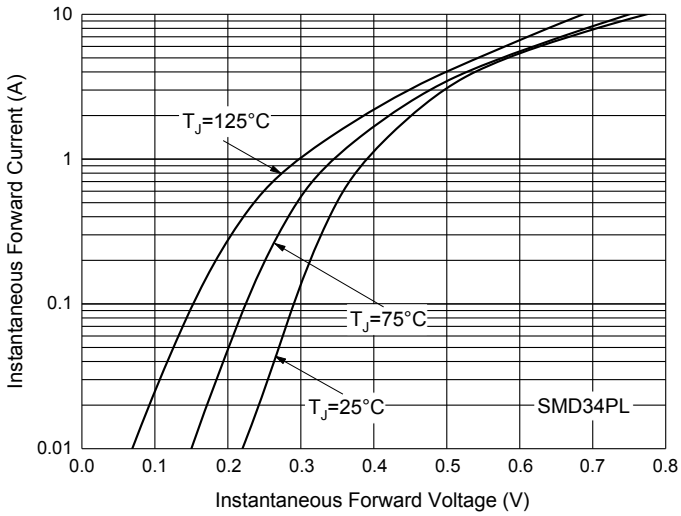


Fig. 4 - Typical Instantaneous Forward Characteristics

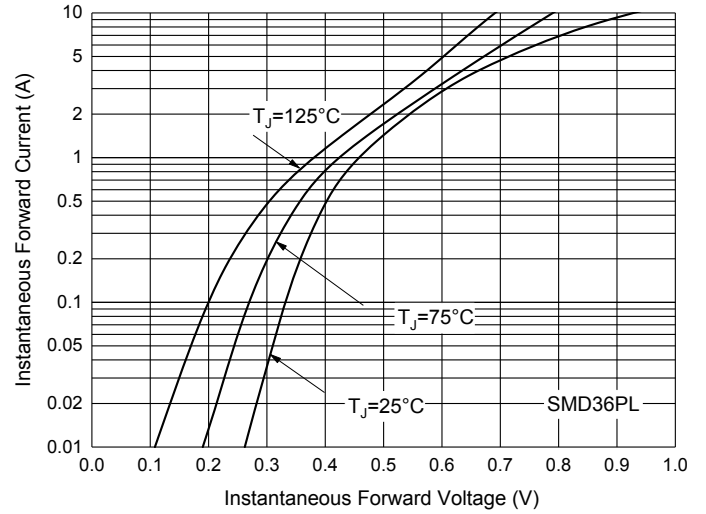


Fig. 5 - Typical Instantaneous Forward Characteristics

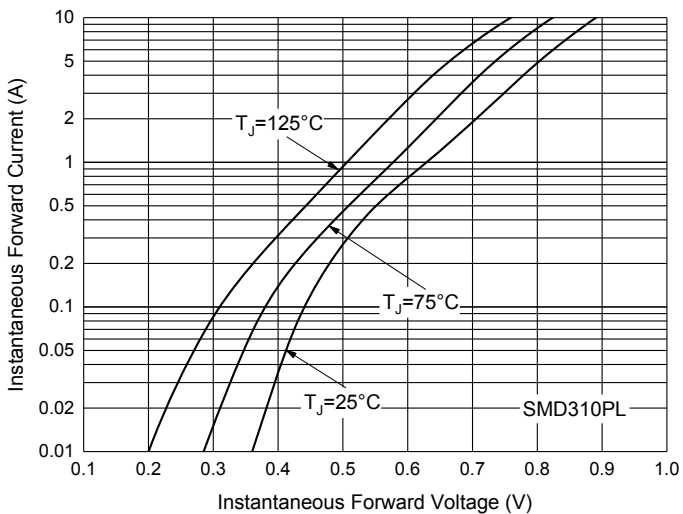
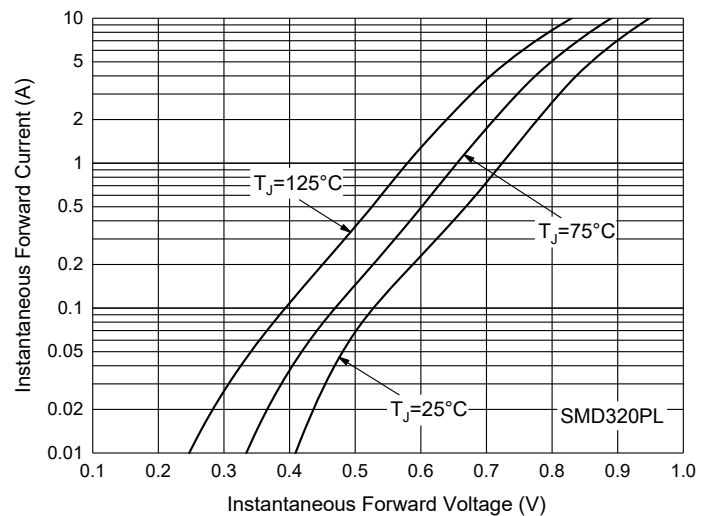


Fig. 6 - Typical Instantaneous Forward Characteristics



## Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

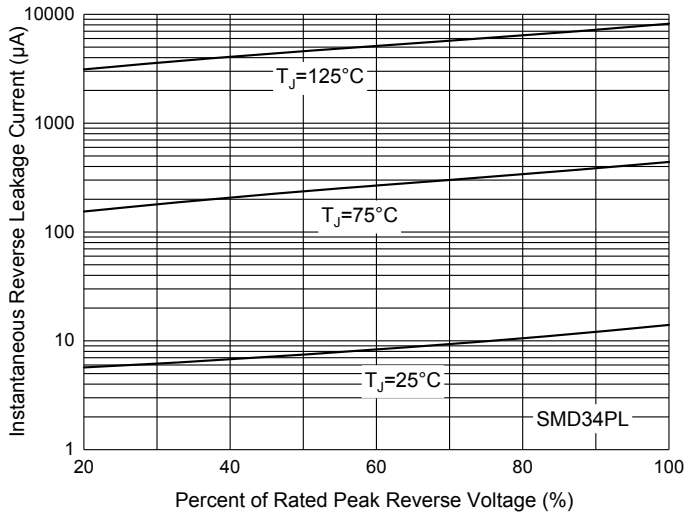


Fig. 8 - Typical Reverse Leakage Characteristics

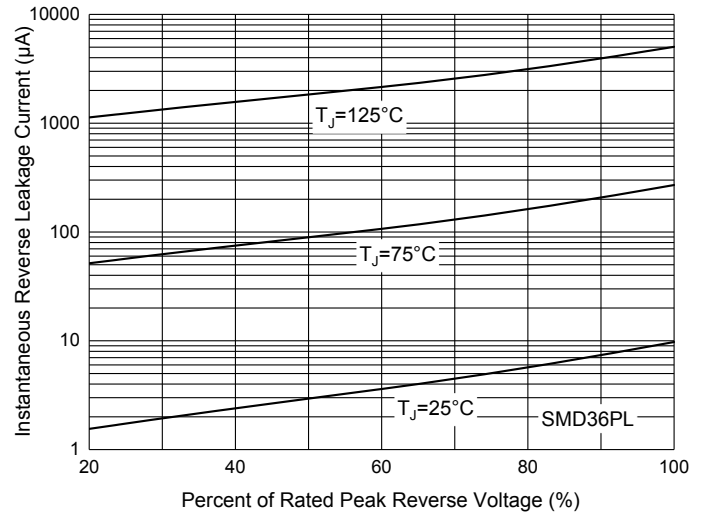


Fig. 9 - Typical Reverse Leakage Characteristics

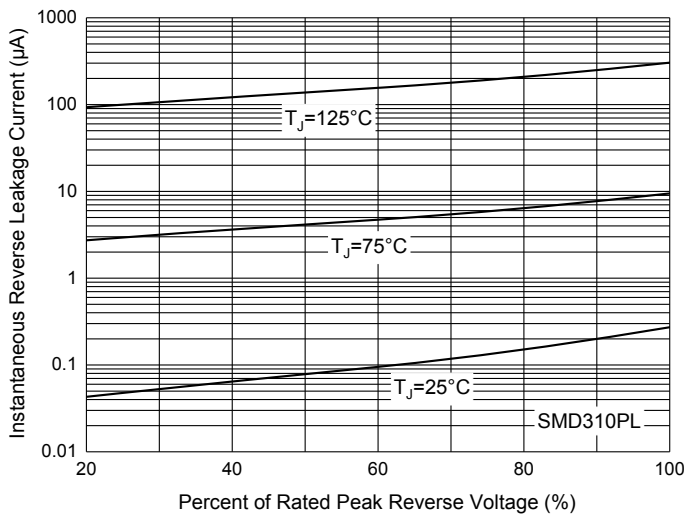
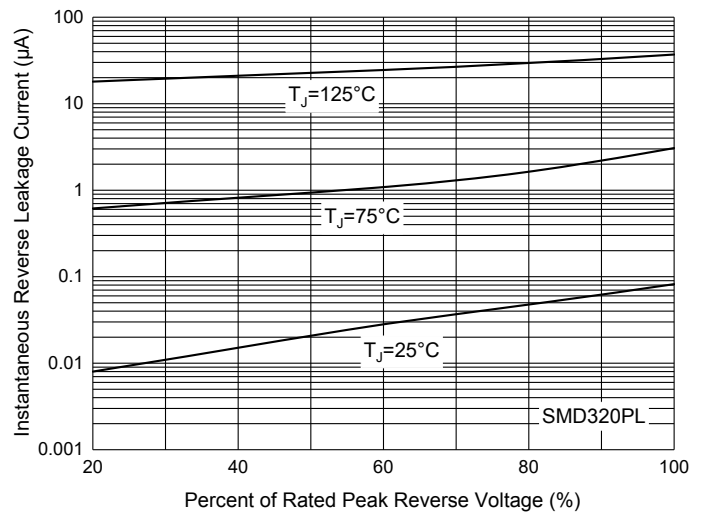


Fig. 10 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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