

#### **Features**

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

# **Maximum Ratings**

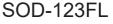
- Operating Junction Temperature Range(32PL-34PL): -55°C to +125°C
- Operating Junction Temperature Range(36PL-320PL):-55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 20°C/W Junction to Lead

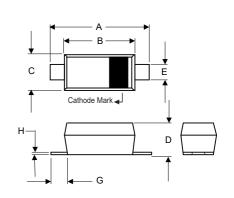
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD32PL	SM32	20V	14V	20V
SMD34PL	SM34	40V	28V	40V
SMD36PL	SM36	60V	42V	60V
SMD38PL	SM38	80V	56V	80V
SMD310PL	SM310	100V	70V	100V
SMD315PL	SM315	150V	105V	150V
SMD320PL	SM320	200V	200V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

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	3.0A	See Fig 1
Peak Forward Surge Current	I <sub>FSM</sub>	80A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SMD32PL~34PL	$V_{F}$	0.50V	I <sub>FM</sub> =3.0A;
SMD36PL SMD38PL-310PL SMD315PL-320PL		0.65V 0.85V 0.90V	T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25°C T <sub>J</sub> =100°C
Typical Junction Capacitance			
SMD32PL~34PL SMD36PL SMD38PL-310PL SMD315PL-320PL	СЈ	140pF 130pF 95pF 65pF	Measured at 1.0MHz VR=4.0V T <sub>J</sub> =25°C

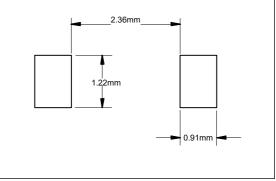
# 3 Amp Schottky Rectifier 20 to 200 Volts





DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.130	0.152	3.30	3.85		
В	0.100	0.122	2.55	3.10		
С	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			
Н		0.010		0.25		

#### Suggested Solder Pad Layout



Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.



## **Curve Characteristics**

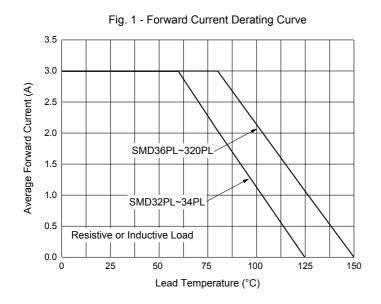


Fig. 3 - Typical Instantaneous Forward Characteristics

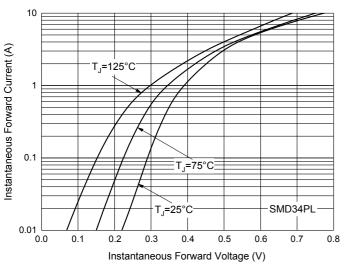


Fig. 5 - Typical Instantaneous Forward Characteristics

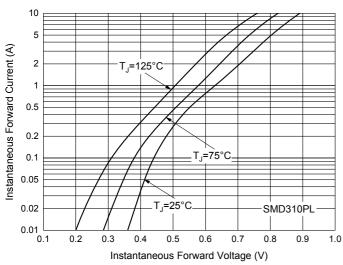


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

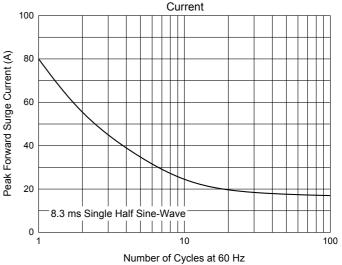


Fig. 4 - Typical Instantaneous Forward Characteristics

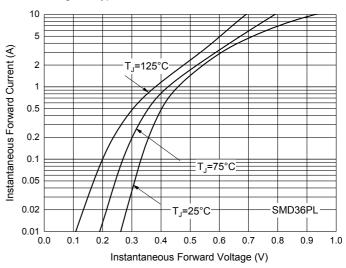
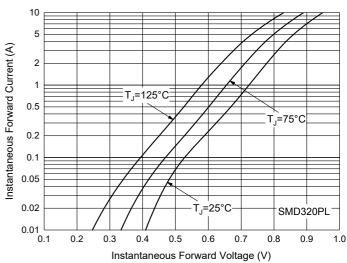


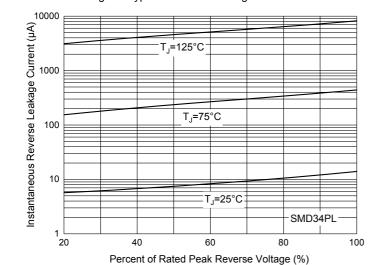
Fig. 6 - Typical Instantaneous Forward Characteristics





## **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics



10000 T<sub>J</sub>=125°C SMD36PL 100 Percent of Rated Peak Reverse Voltage (%)

Fig. 8 - Typical Reverse Leakage Characteristics

Fig. 9 - Typical Reverse Leakage Characteristics

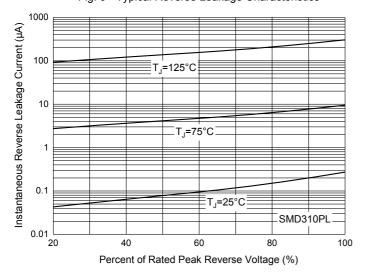
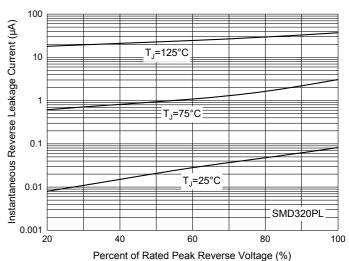


Fig. 10 - Typical Reverse Leakage Characteristics





# **Ordering Information**

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

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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