

#### **Features**

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

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance(Note 3): 16°C/W Junction to Lead
- Maximum Thermal Resistance(Note 3): 70°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SL34PL	SL34	40V	28V	40V
SL36PL	SL36	60V	42V	60V
SL310PL	SL310	100V	70V	100V

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

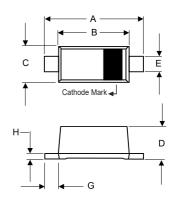
Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>A</sub> =75°C
Peak Forward Surge Current	I <sub>FSM</sub>	60A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage			
SL34PL	$V_{F}$	0.45V	I <sub>FM</sub> =3.0A;
SL36PL		0.50V	T <sub>A</sub> =25°C
SL310PL		0.60V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA	T <sub>A</sub> =25°C

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 7a.
- 3. Thermal Resistance Between Junction and Ambient and Between Junction and Lead Mounted on P.C.B with 3mm\*3mm.

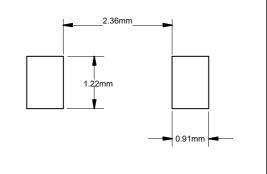
# 3 Amp Low VF Schottky Rectifier 40 to 100 Volts

# SOD-123FL



DIMENSIONS						
DIM	INC	HES	MM		NOTE	
DIIVI	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		
Е	0.020	0.041	0.50	1.05		
G	0.010		0.25			
Ι		0.010		0.25		

#### Suggested Solder Pad Layout





## **Curve Characteristics**

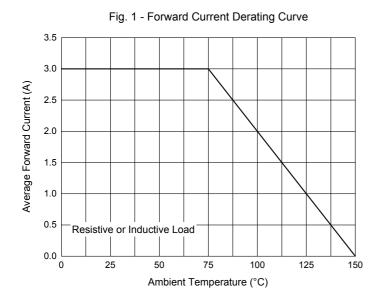


Fig. 3 - Typical Instantaneous Forward Characteristics

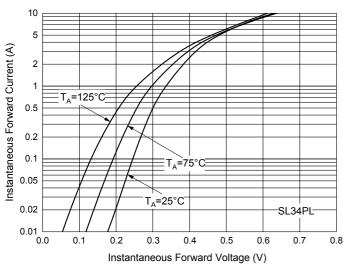


Fig. 5 - Typical Instantaneous Forward Characteristics

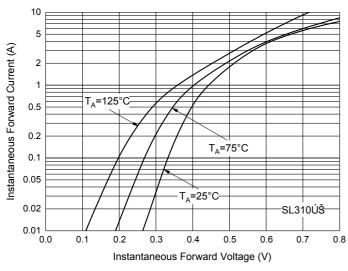


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

70

40

40

30

20

8.3 ms Single Half Sine-Wave

Fig. 4 - Typical Instantaneous Forward Characteristics

Number of Cycles at 60 Hz

100

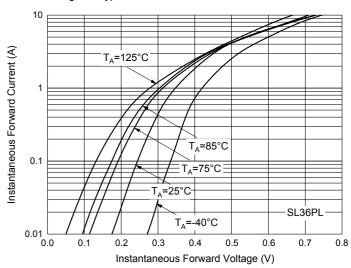
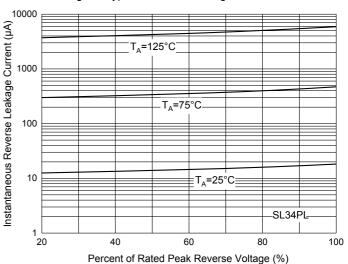


Fig. 6 - Typical Reverse Leakage Characteristics





# **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

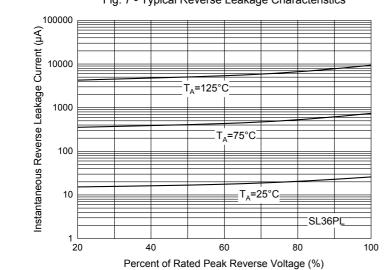
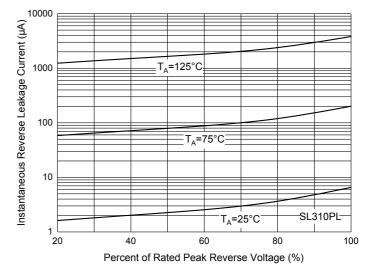


Fig. 8 - Typical Reverse Leakage Characteristics





# **Ordering Information**

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

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