

## Features

- Halogen Free. "Green" Device (Note 1)
- High Surge Capability
- Low Forward Voltage
- Low Profile Package
- 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(SMD22PL~SMD24PL):-65°C to +125°C
- Operating Junction Temperature Range(SMD26PL~SMD210PL):-65°C to +150°C
- Storage Temperature Range(SMD22PL~SMD24PL):-65°C to +125°C
- Storage Temperature Range(SMD26PL~SMD210PL):-65°C to +150°C
- Typical Thermal Resistance(Note3): 60°C/W Junction to Ambient
- Typical Thermal Resistance(Note3): 30°C/W Junction to Case
- Typical Thermal Resistance(Note3): 21°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD22PL	M2	20V	14V	20V
SMD24PL	M4	40V	28V	40V
SMD26PL	M6	60V	42V	60V
SMD28PL	M8	80V	56V	80V
SMD210PL	M10	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=90^\circ\text{C}$
Surge Forward Current	$I_{FSM}$	50A	8.3ms, Half Sine
Power Dissipation	$P_D$	1.68W	
Forward Voltage	$V_F$	0.5V(Max) 0.7V(Max) 0.85V(Max)	$I_{FM}=2.0A;$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current	$I_R$	0.1mA(Max)	$T_J=25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	210pF(Typ)	$f=1.0\text{MHz}, V_R=4V$

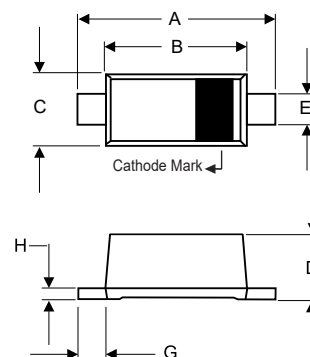
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

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

3. Thermal Resistance:PC Board Mounted on 0.2\*0.2"(5\*5mm) copper pad area.

# Schottky Barrier Diodes 20 to 100 Volts

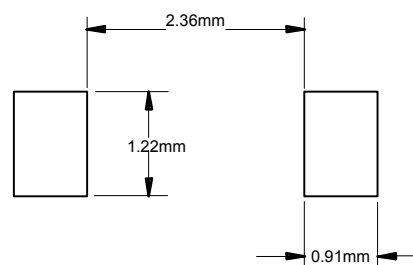
## SOD-123FL



### DIMENSIONS

DIM	INCHES		MM		NOTE
	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

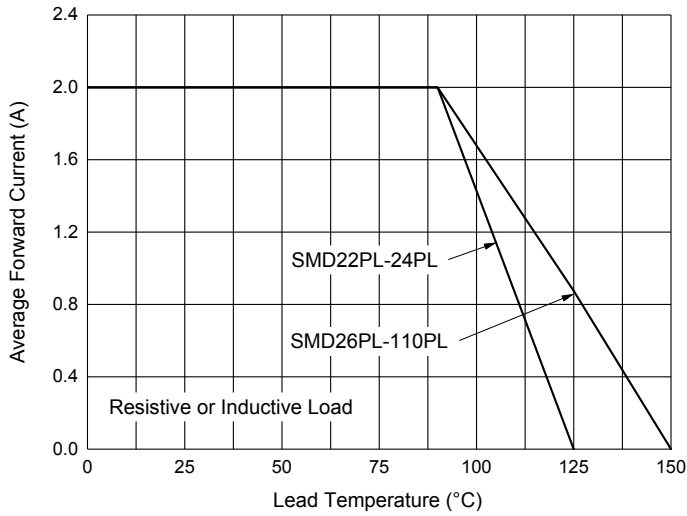


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

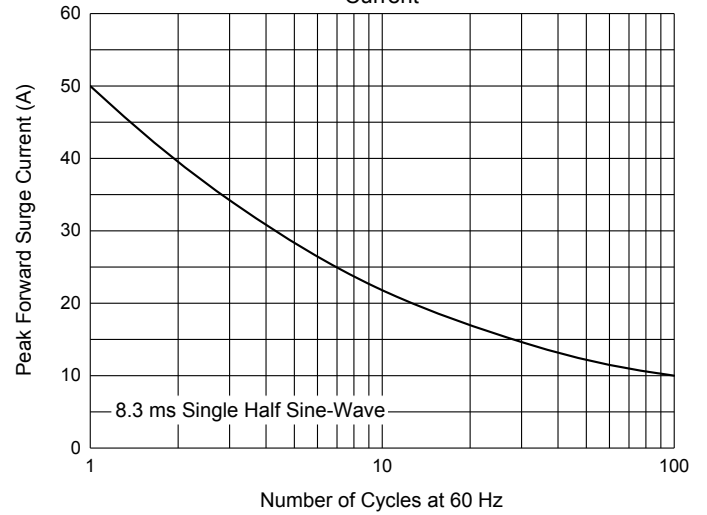


Fig. 3 - Typical Instantaneous Forward Characteristics

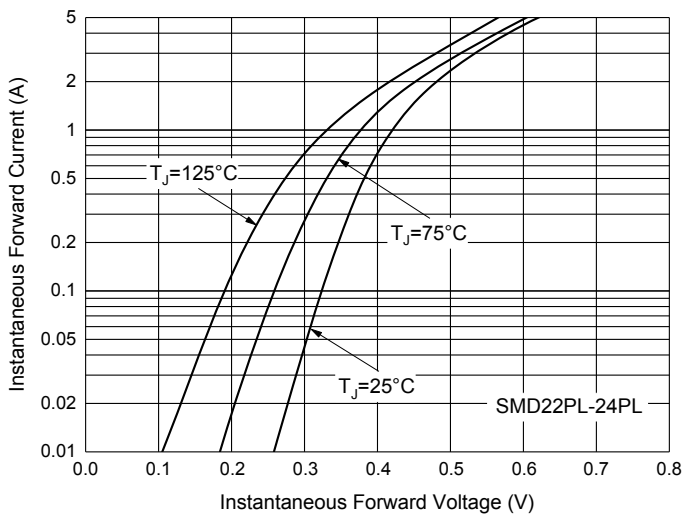


Fig. 4 - Typical Instantaneous Forward Characteristics

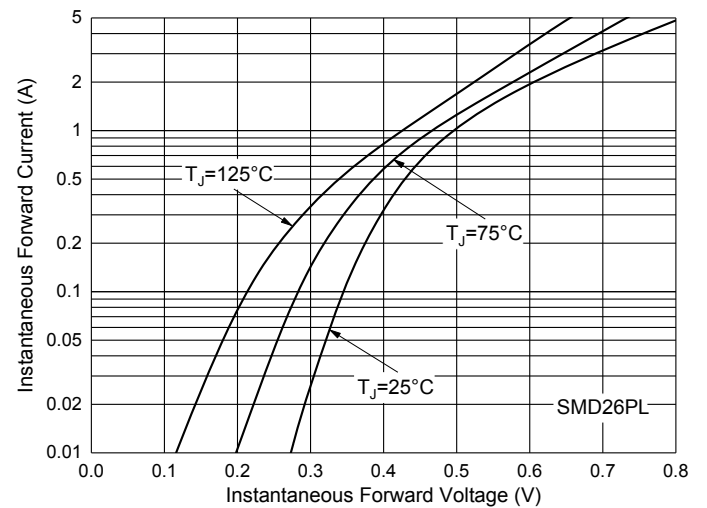


Fig. 5 - Typical Instantaneous Forward Characteristics

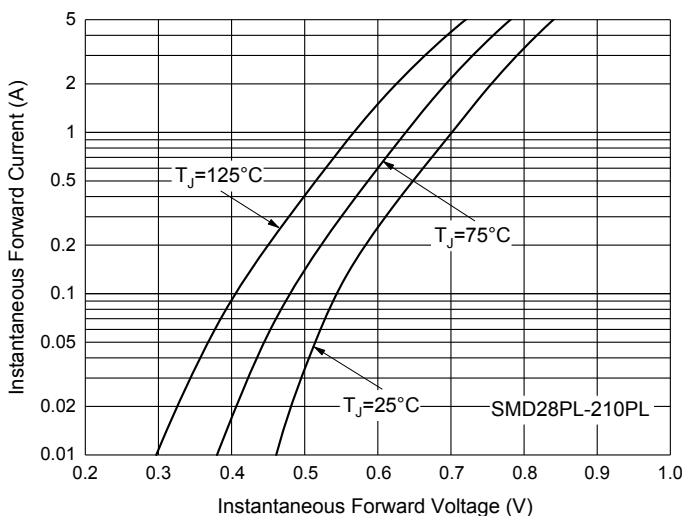
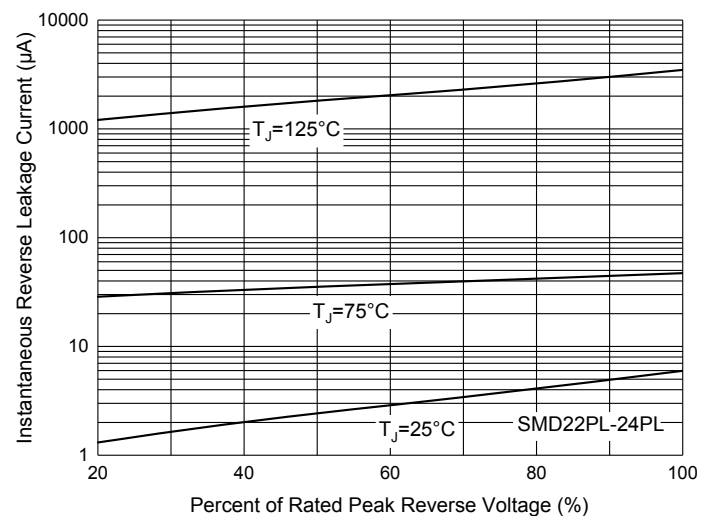


Fig. 6 - Typical Reverse Leakage Characteristics



**Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

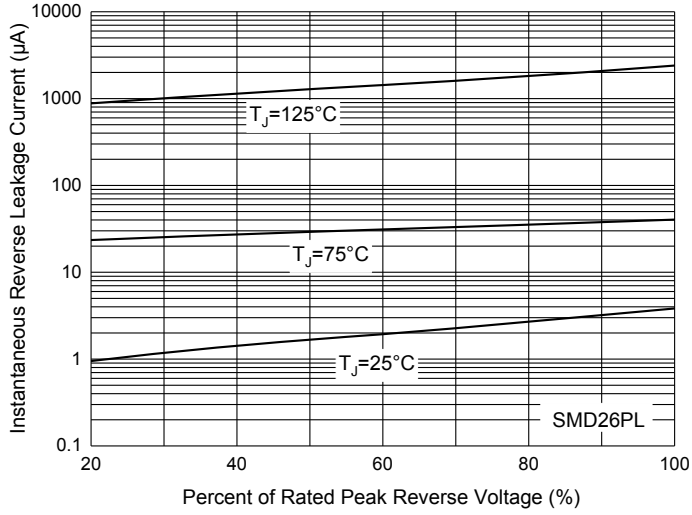
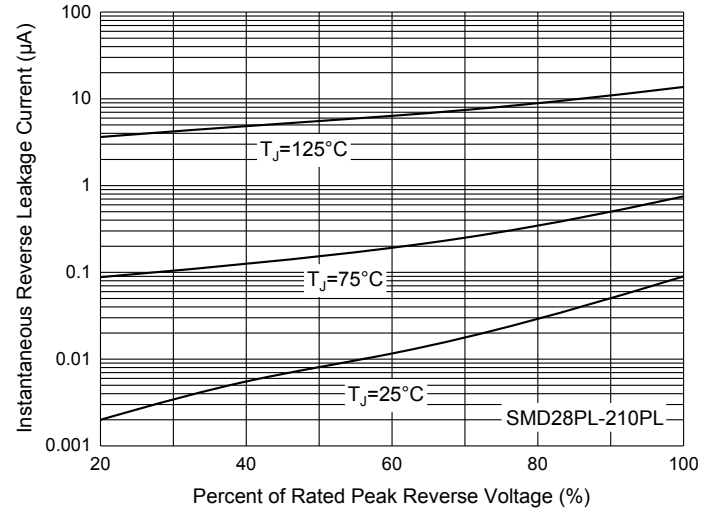


Fig. 8 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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