

Features

- Halogen Free. "Green" Device (Note 1)
- High Surge Capability
- AEC-Q101 Qualified
- Low Profile Package
- 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:
(SMD22PLHE3~SMD26PLHE3): -55°C to +150°C
(SMD28PLHE3~SMD210PLHE3): -55°C to +175°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance (Note 3): 60°C/W Junction to Ambient
- Typical Thermal Resistance (Note 3): 30°C/W Junction to Case
- Typical Thermal Resistance (Note 3): 21°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD22PLHE3	M2	20V	14V	20V
SMD24PLHE3	M4	40V	28V	40V
SMD26PLHE3	M6	60V	42V	60V
SMD28PLHE3	M8	80V	56V	80V
SMD210PLHE3	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	
Maximum Forward Voltage			
SMD22PLHE3~24PLHE3	V_F	0.55V	$I_{FM}=2.0\text{A}; T_J=25^\circ\text{C}$
SMD26PLHE3		0.70V	
SMD28PLHE3~210PLHE3		0.85V	
Maximum DC Reverse Current			
SMD22PLHE3~26PLHE3	I_R	0.1mA 10mA	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
SMD28PLHE3~210PLHE3		0.1mA 5mA	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Typical Junction Capacitance			
SMD22PLHE3~24PLHE3	C_J	115pF	$f=1.0\text{MHz}, VR=4\text{V}$
SMD26PLHE3		95pF	
SMD28PLHE3~210PLHE3		60pF	

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine,

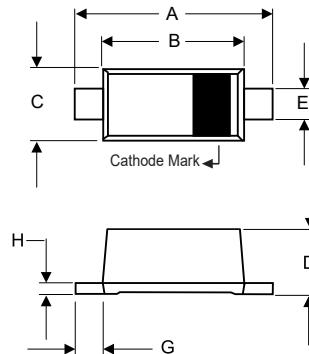
<900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

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

3. Thermal Resistance:PC Board Mounted on 0.2" x 0.2" (5x5mm) copper pad area.

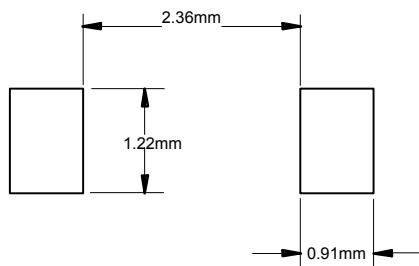
2 Amp Schottky Barrier Diodes 20 to 100 Volts

SOD-123FL



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	0.049	0.90	1.25	
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

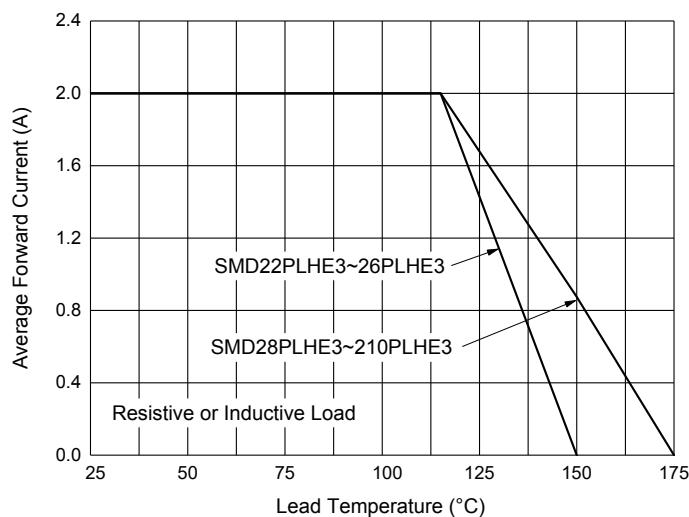


Fig. 3 - Typical Instantaneous Forward Characteristics

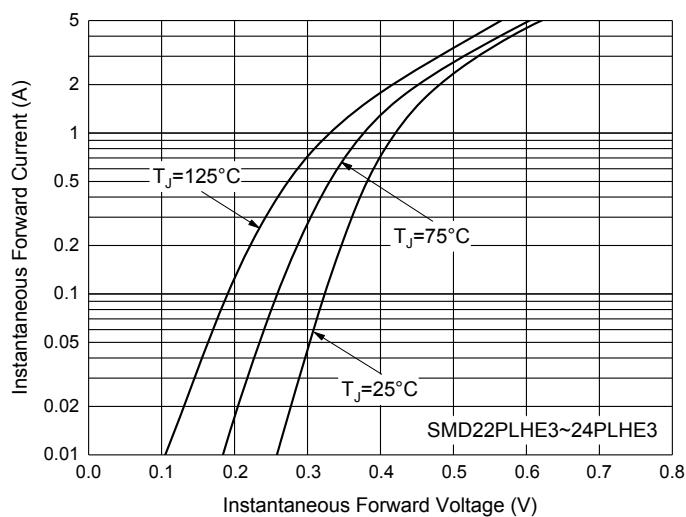


Fig. 5 - Typical Instantaneous Forward Characteristics

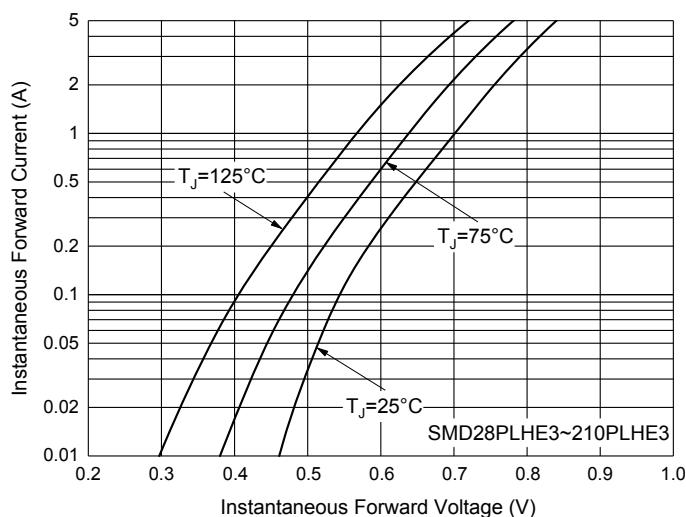


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

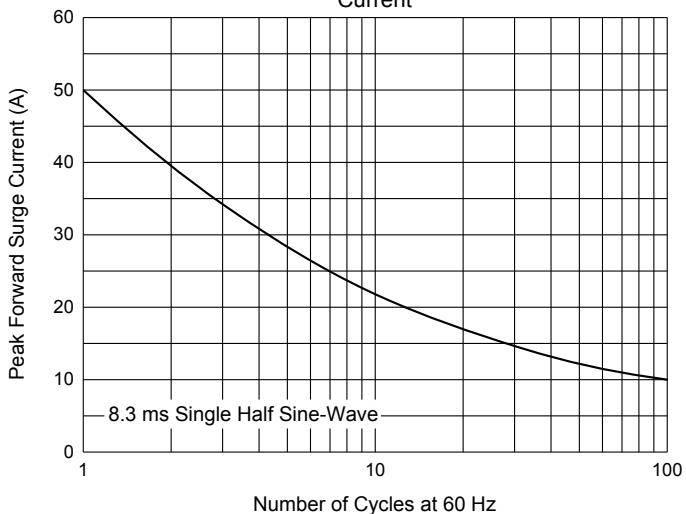


Fig. 4 - Typical Instantaneous Forward Characteristics

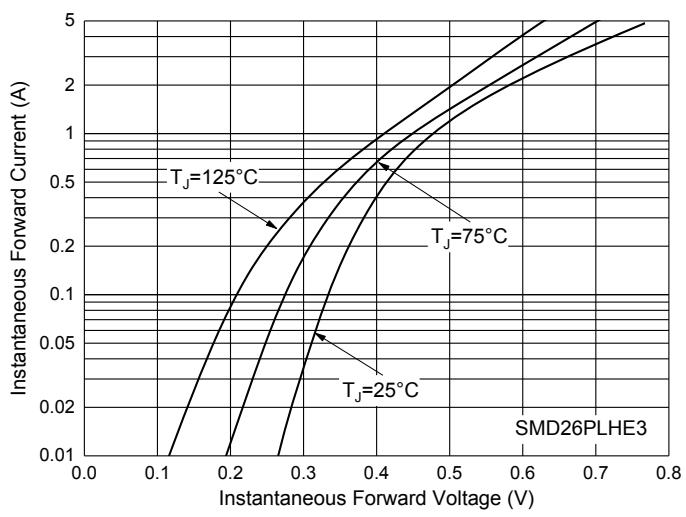
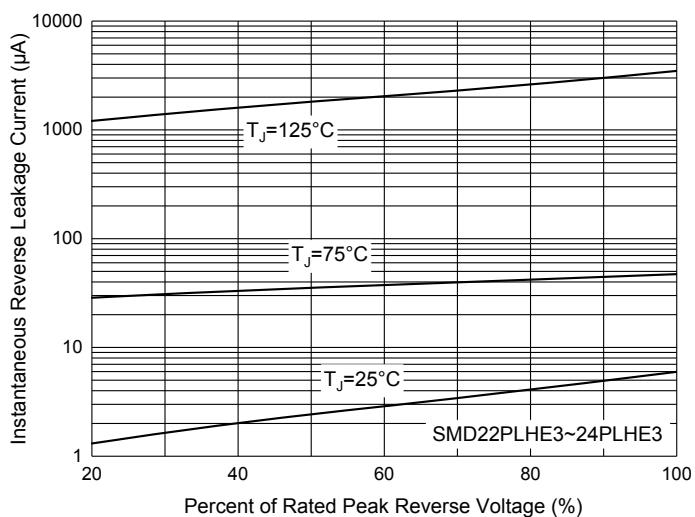


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

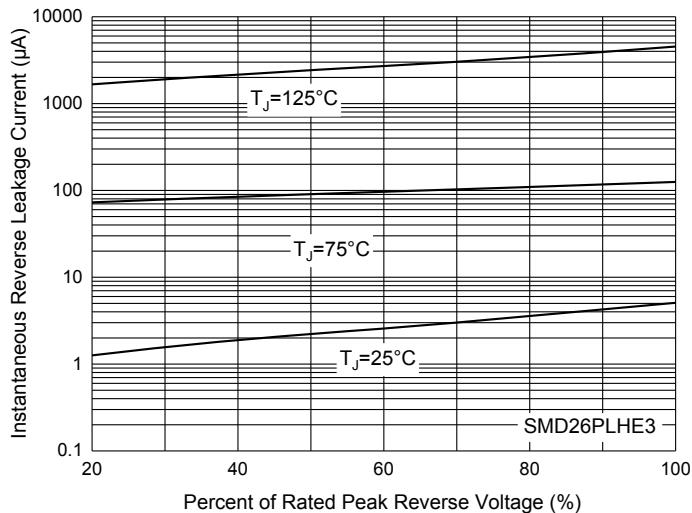
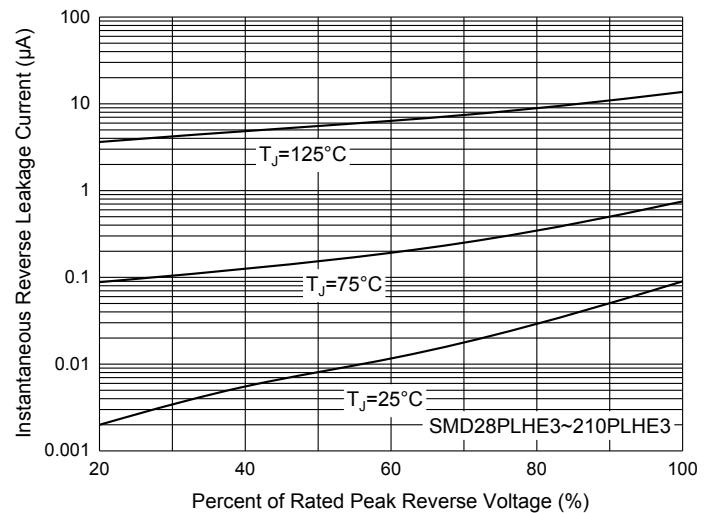


Fig. 8 - Typical Reverse Leakage Characteristics



Ordering Information

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

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