

Features

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

1 Amp
Gi fZUMY'Aci bh
GW ch_mF YWfZYf
50 to 200 Volts

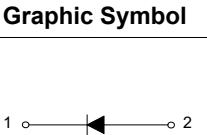
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value						Unit
		SMD 15PL	SMD 16PL	SMD 18PL	SMD 110PL	SMD 1150PL	SMD 1200PL	
Peak Repetitive Reverse Voltage	V _{RRM}							
Working Peak Reverse Voltage	V _{RWM}	50	60	80	100	150	200	V
DC Blocking Voltage	V _R							
RMS Reverse Voltage	V _{RMS}	35	42	56	70	105	140	V
Average Rectified Forward Current	I _{F(AV)}	1						A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I _{FSM}	30						A
Current Squared Time @1ms≤t≤8.3ms	I ² t	3.735						A ² s

Marking code

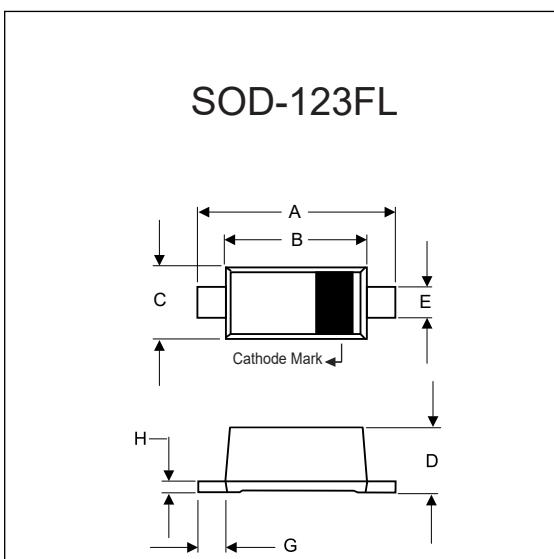
Part Number	Marking Code
SMD15PL	D5
SMD16PL	D6
SMD18PL	D8
SMD110PL	D10
SMD1150PL	D15
SMD1200PL	D20

Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode		
2	Anode		

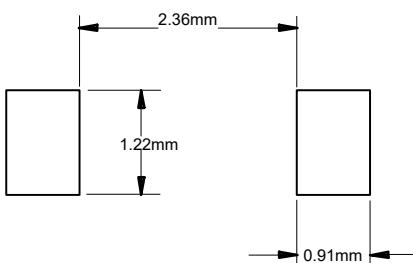
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High temperature solder exemption applied, see EU directive annex 7a.



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



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T _J	Operating Junction Temperature Range		-55		150	°C
T _{stg}	Storage Temperature Range		-55		150	°C
R _{th(J-L)}	Thermal Resistance from Junction to Lead	Note 1		25		°C/W
R _{th(J-A)}	Thermal Resistance from Junction to Ambient	Note 1		88		°C/W

Note:

1. Mounted on P.C.B. with 5mm*5mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage SMD15PL~SMD16PL SMD18PL~SMD1150PL SMD1200PL	V _F	I _F =1A;T _J =25°C			0.70 0.85 0.95	V
Reverse Current SMD15PL~SMD16PL SMD18PL~SMD1200PL	I _R	at Rated V _R ;T _J =25°C at Rated V _R ;T _J =125°C at Rated V _R ;T _J =25°C at Rated V _R ;T _J =125°C			0.1 20 0.01 5	mA
Junction Capacitance SMD15PL~SMD16PL SMD18PL~SMD110PL SMD1150PL~SMD1200PL	C _J	V _R =4V;f=1MHz;T _J =25°C		40 30 20		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

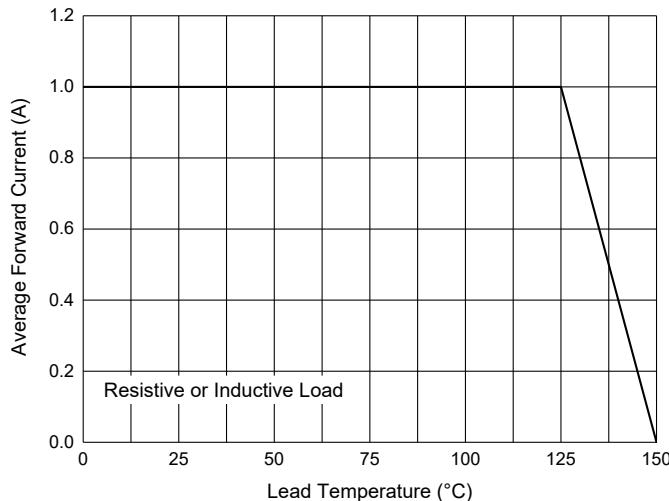


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

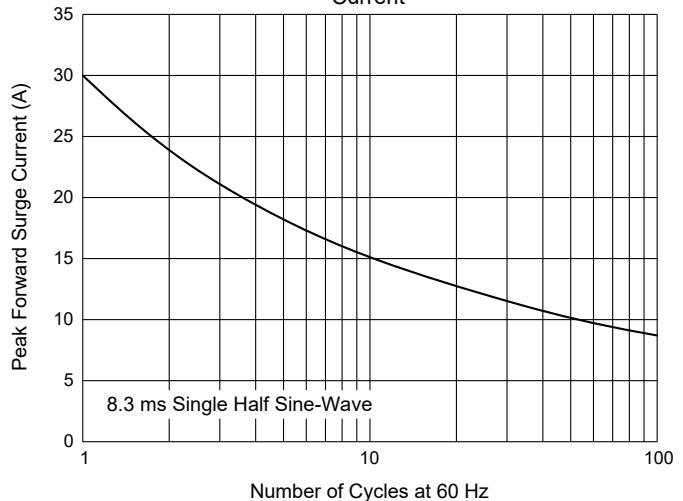


Fig. 3 - Typical Forward Characteristics

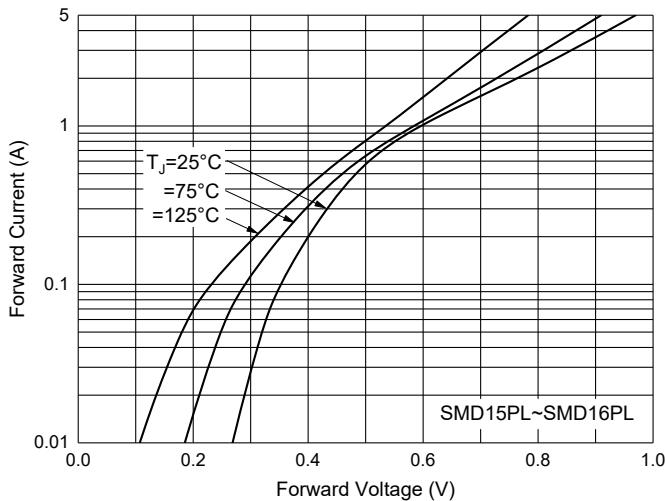


Fig. 4 - Typical Reverse Leakage Characteristics

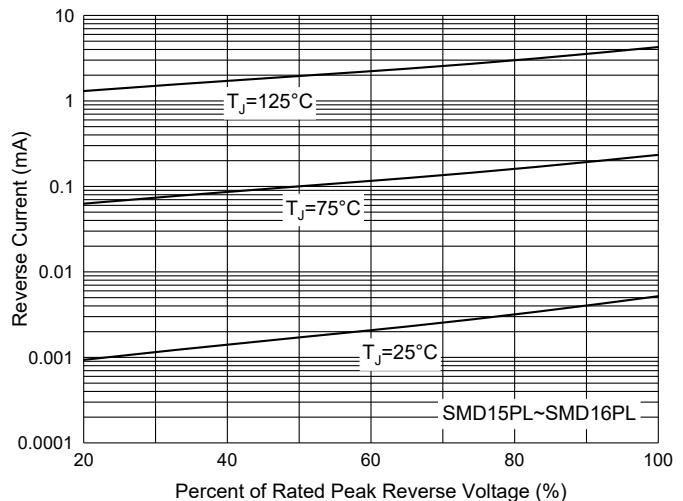


Fig. 5 - Typical Forward Characteristics

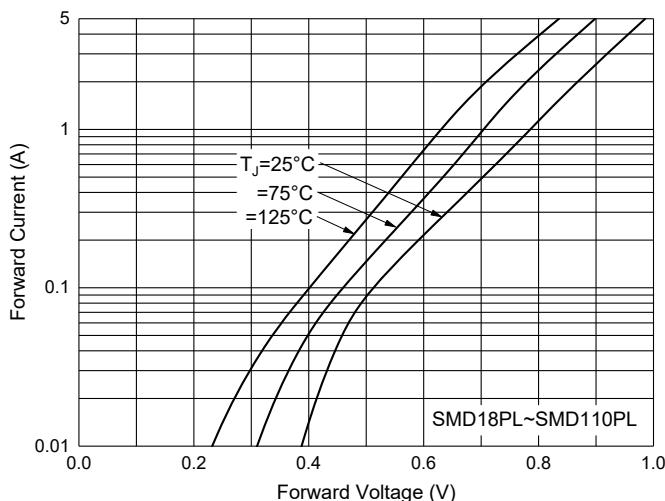
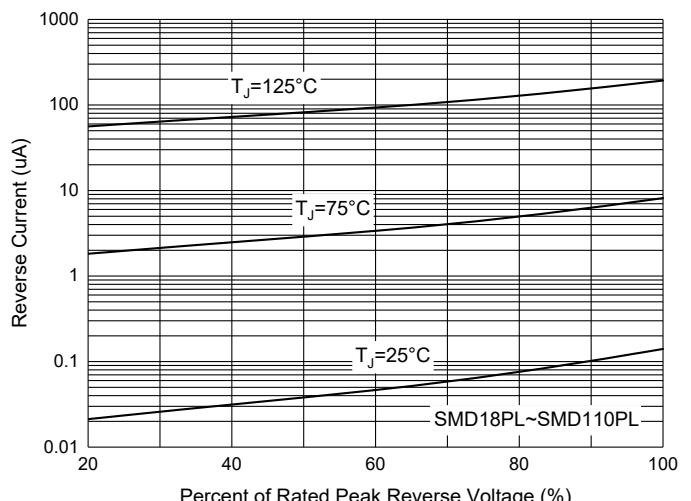


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Forward Characteristics

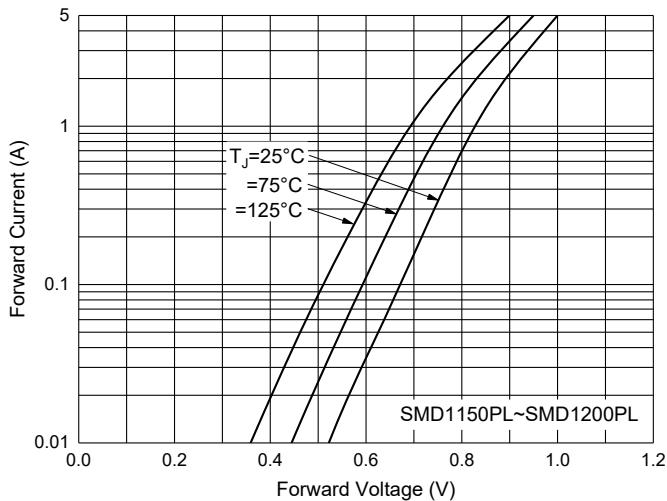


Fig. 8 - Typical Reverse Leakage Characteristics

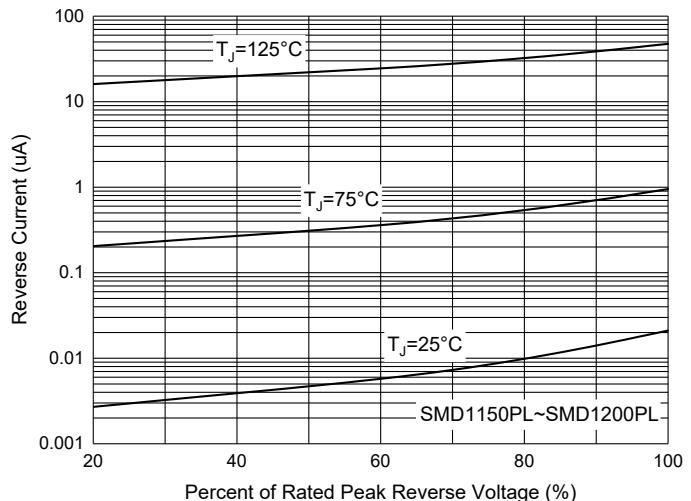


Fig. 9 - Typical Capacitance Characteristics

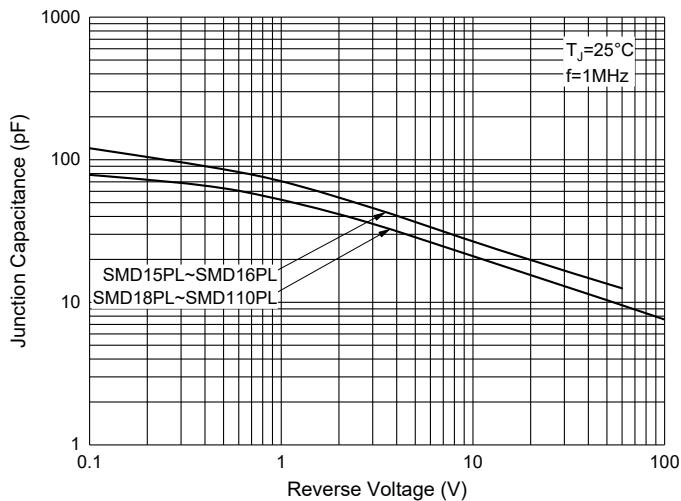
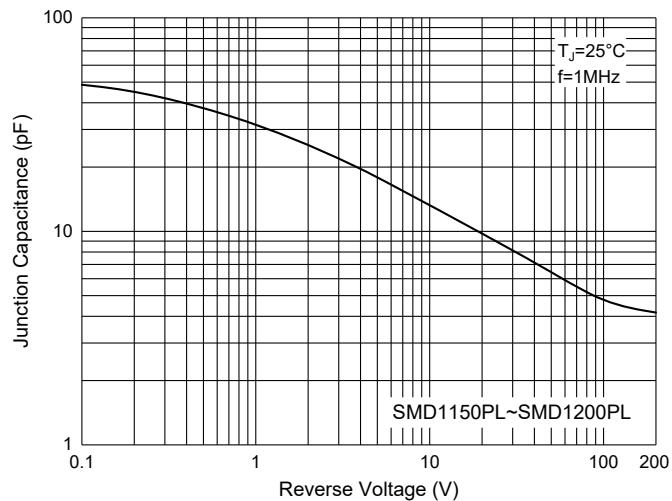


Fig. 10 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:2.5Kpcs/Reel
Part Number-13P	Tape&Reel:10Kpcs/Reel

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