



Micro Commercial Components



Micro Commercial Components  
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## SMD15PL THRU SMD18PL

### 1 Amp Schottky Rectifier 50 to 80 Volts

## Features

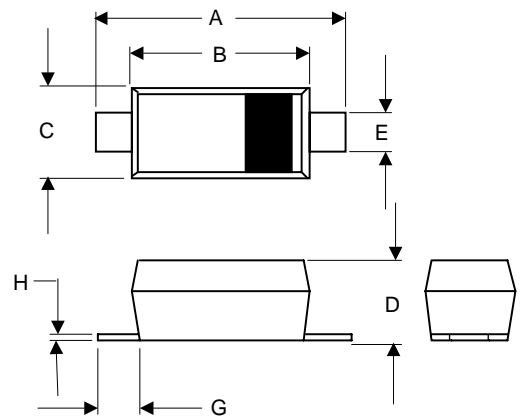
- Halogen free available upon request by adding suffix "-HF"
- Schottky Barrier Rectifier
- High Current Capability
- Low Forward Voltage
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 28°C/W Junction To Lead

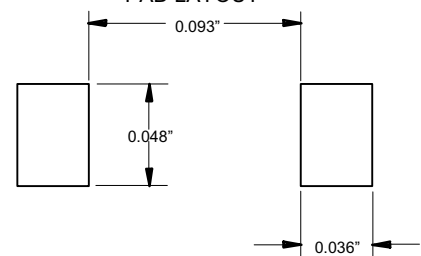
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD15PL	D5	50V	35V	50V
SMD16PL	D6	60V	42V	60V
SMD18PL	D8	80V	56V	80V

## SOD-123FL



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.122	2.55	3.10	
C	.055	.075	1.40	1.90	
D	.035	.053	0.90	1.35	
E	.020	.041	0.50	1.05	
G	.010	-----	0.25	-----	
H	-----	.010	----	.25	

### SUGGESTED SOLDER PAD LAYOUT



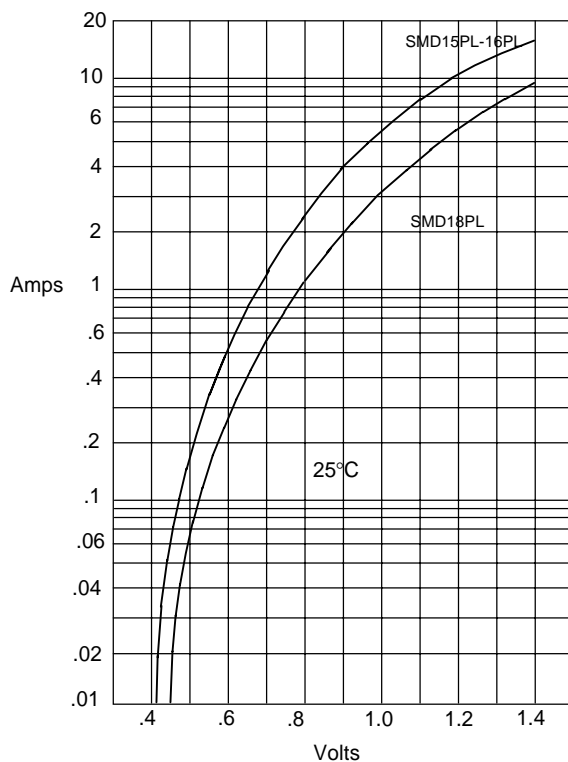
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_L = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SMD15PL-16PL SMD18PL	$V_F$	.70V .85V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}(\text{Note:2})$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 20mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance SMD12PL -16PL SMD18PL	$C_J$	110pF 30pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Note:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
2.Pulse test: Pulse width 300 sec, Duty cycle 2%

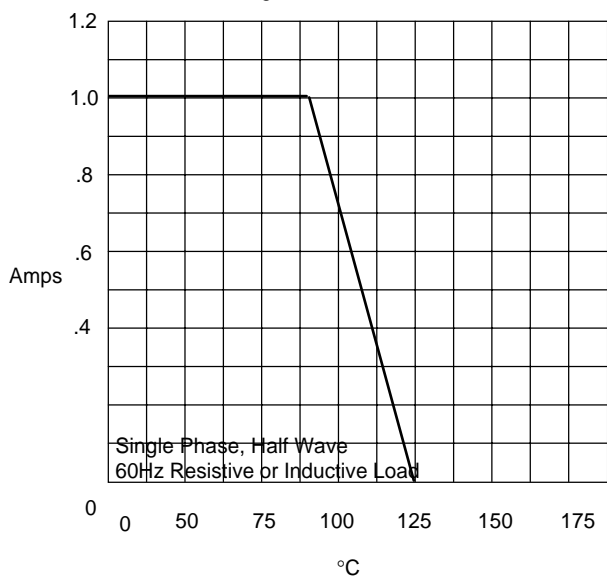
# SMD15PL thru SMD18PL

Figure 1  
Typical Forward Characteristics



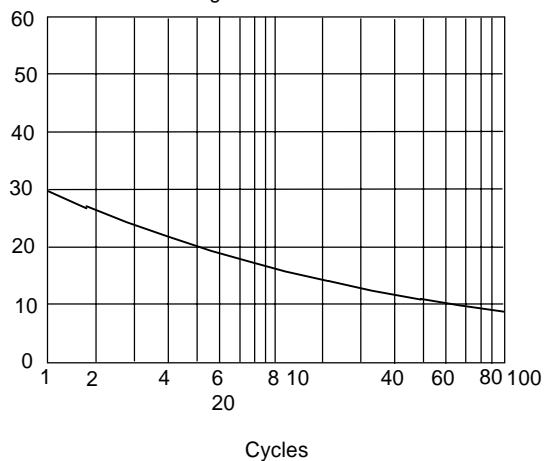
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Lead Temperature - °C

Figure 3  
Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

## 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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