



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SM5817PL THRU SM5819PL

Schottky Barrier Diodes 20 to 40 Volts

Features

- Halogen free available upon request by adding suffix "-HF"
- High Surge Capability
- Low Forward Voltage
- Low Profile Package
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

Mechanical Data

- Packaging: SOD-123FL
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking Code: SM5817PL---K2; SM5818PL---K3 ; SM5819PL---K4

Maximum Ratings

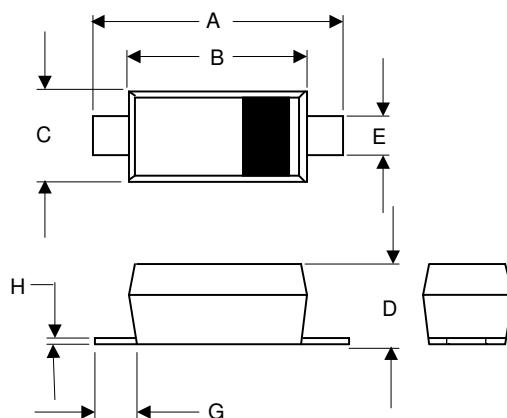
Symbol	Rating	Rating	Unit
V_{RMS}	Maximum RMS Voltage	SM5817PL	14
		SM5818PL	21
		SM5819PL	28
V_{RRM}	Repetitive Reverse Voltage	SM5817PL	20
		SM5818PL	30
		SM5819PL	40
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^{\circ}C$	1.0	A
I_{FSM}	Surge Forward Current at $T_L=70^{\circ}C, 8.3ms$	30	A
$R_{\theta JA}$	Typical Thermal Resistance(Note2)	88	$^{\circ}C/W$
$R_{\theta JC}$		43	$^{\circ}C/W$
$R_{\theta JL}$		30	$^{\circ}C/W$
P_D	Power Dissipation	1.14	W
T_J	Junction Temperature	-65 to +125	$^{\circ}C$
T_{STG}	Storage Temperature	-65 to +125	$^{\circ}C$

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units			
V_F	Forward Voltage (@1A dc)	SM5817PL	---	0.45	---			
		SM5818PL	---	0.56	---			
		SM5819PL	---	0.60	---			
I_R	Leakage Current	---	---	---	@ $T_A=25^{\circ}C$	0.1	---	mA
					@ $T_A=100^{\circ}C$	9.0	---	mA
C_j	Typical Junction Capacitance @ $f=1.0MHz, V_r=4V$	---	110	---	pF			

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
 2. Thermal Resistance : PC Board Mounted on 0.2*0.2"(5*5mm) copper pad area.

SOD-123FL



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

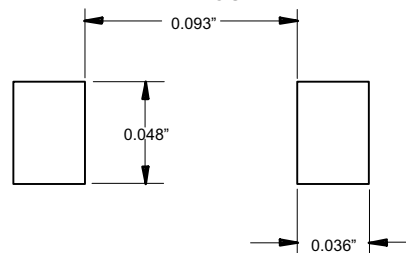


Fig. 1-TYPICAL FORWARD CURRENT

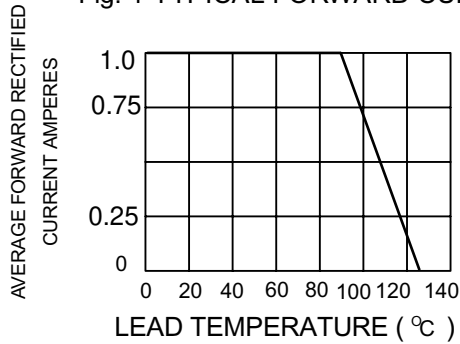


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

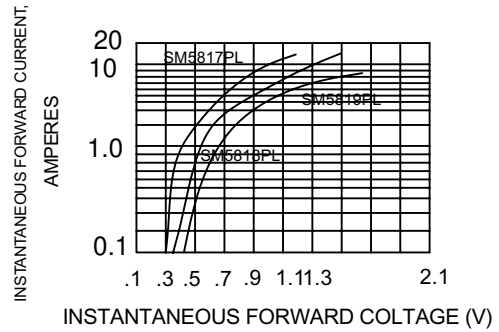


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

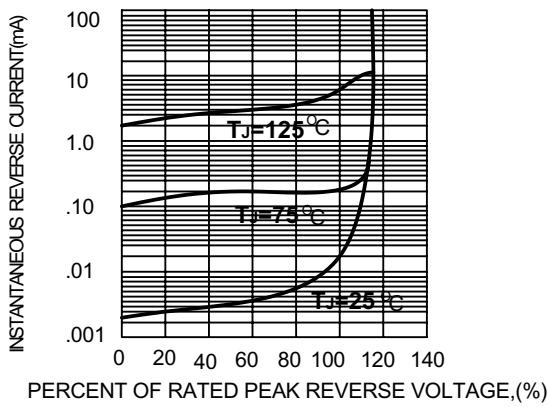


Fig. 4-FORWARD SURGE CURRENT

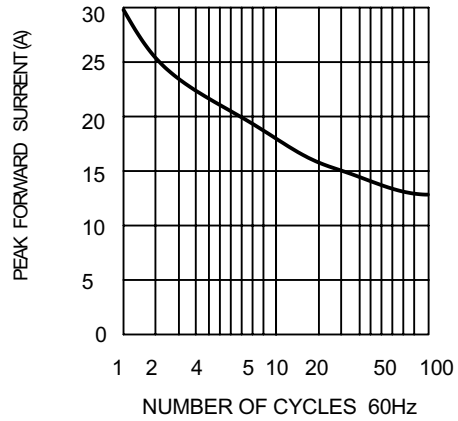
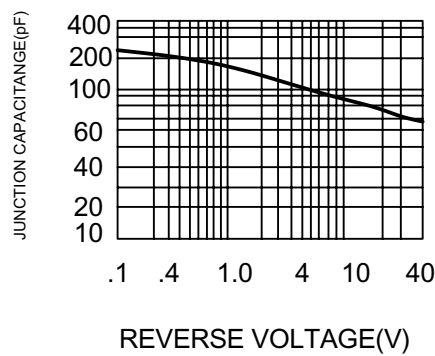


Fig. 5-TYPICAL JUNCTION CAPACITANCE





Micro Commercial Components

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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