

SM5817PL THRU SM5819PL

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

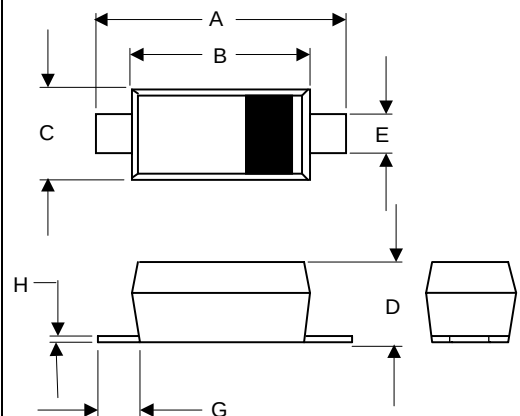
Electrical Characteristics @ 25°C Unless Otherwise Specified

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

Schottky Barrier Diodes 20 to 40 Volts

SOD-123FL



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

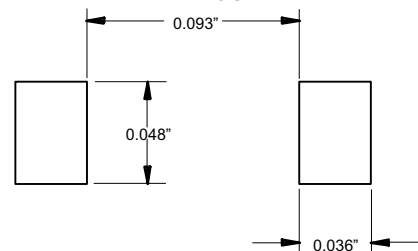


Fig. 1-TYPICAL FORWARD CURRENT

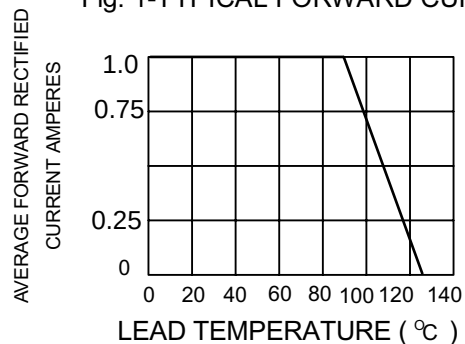


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

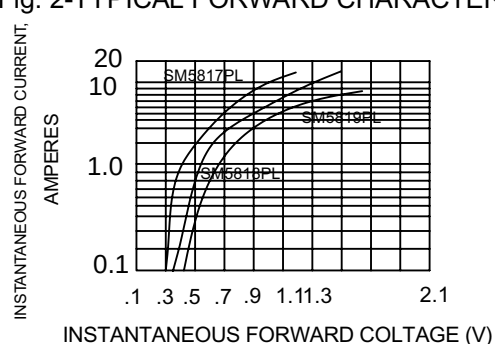


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

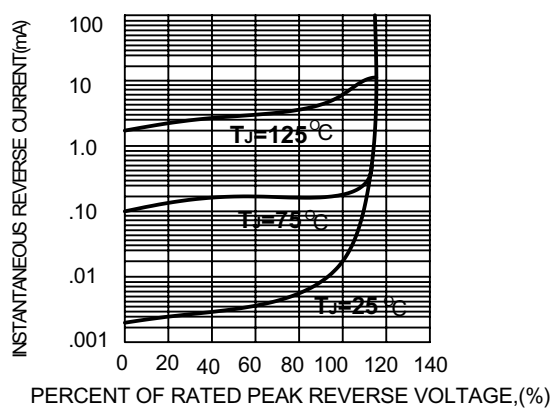


Fig. 4-FORWARD SURGE CURRENT

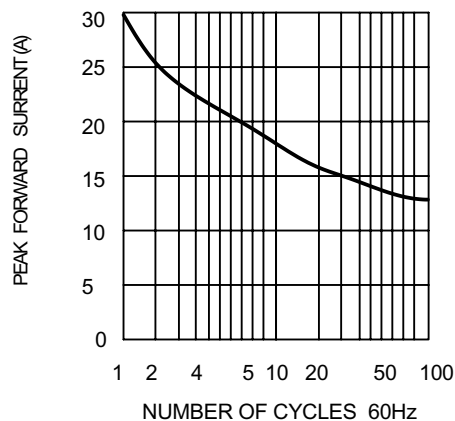
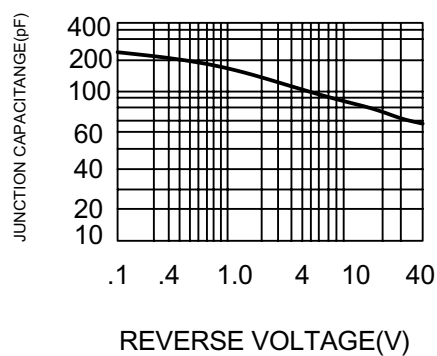


Fig. 5-TYPICAL JUNCTION CAPACITANCE





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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