



THE DATASHEET OF SM5817PL-TP



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

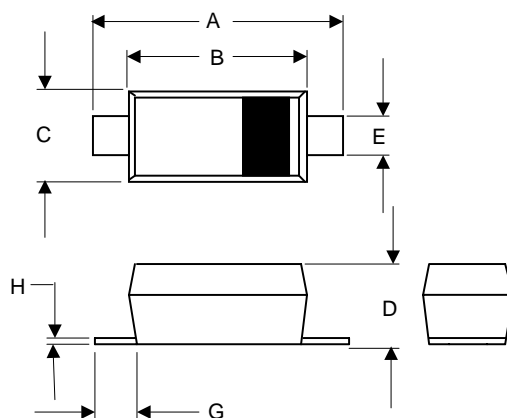
Symbol	Rating	Rating	Unit		
V _{RMS}	Maximum RMS Voltage	SM5817PL SM5818PL SM5819PL	14 21 28	V	
	V _{RRM}	Repetitive Reverse Voltage	SM5817PL SM5818PL SM5819PL	20 30 40	V
		I _{F(AV)}	Rectified Current (Average) Half Wave Rectification with Resist. Load at T _L =90°C	1.0	A
I _{FSM}			Surge Forward Current at ,T _L =70°C,8.3ms	30	A
R _{thJA}	Typical Thermal Resistance(Note2)		88	°C/W	
R _{thJC}		43	°C/W		
R _{thJL}		30	°C/W		
P _D	Power Dissipation		1.14	W	
T _J	Junction Temperature		-65 to +125	°C	
T _{STG}	Storage Temperature		-65 to +125	°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					
		@T _A =25°C	---	---	0.1	mA
		@T _A =100°C	---	---	9.0	mA
C _J	Typical Junction Capacitance @f=1.0MHz, V _r =4V	---	110	---	pF	

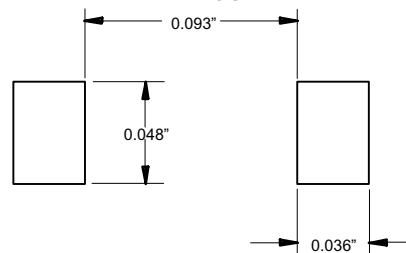
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.
2. Thermal Resistance : PC Board Mounted on 0.2*0.2"(5*5mm) copper pad area.

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



SM5817PL-SM5819PL



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Fig. 1-TYPICAL FORWARD CURRENT

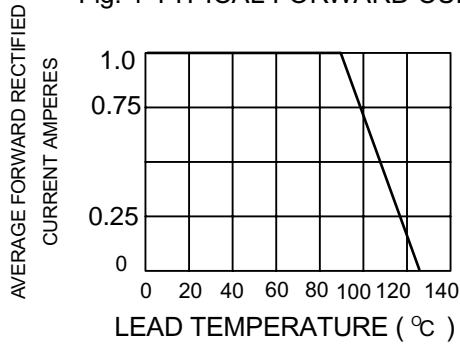


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

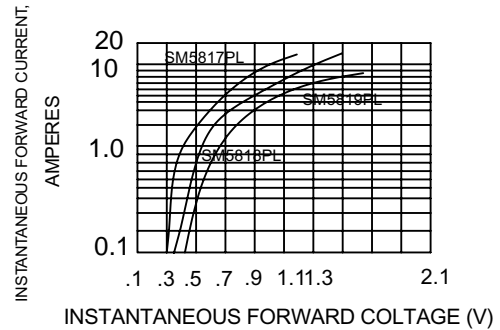


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

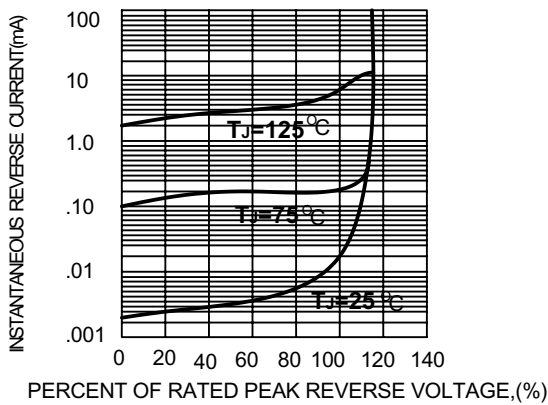


Fig. 4-FORWARD SURGE CURRENT

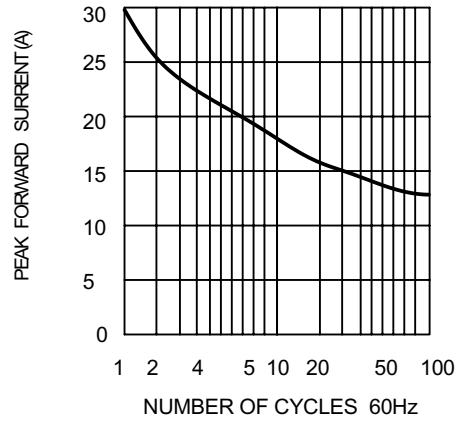
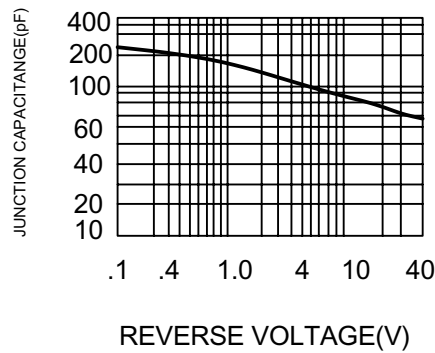


Fig. 5-TYPICAL JUNCTION CAPACITANCE





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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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