



Micro Commercial Components

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SM5817PL THRU SM5819PL

Schottky Barrier Diodes 20 to 40 Volts

Features

- High Surge Capability
- Low Forward Voltage
- Low Profile Package

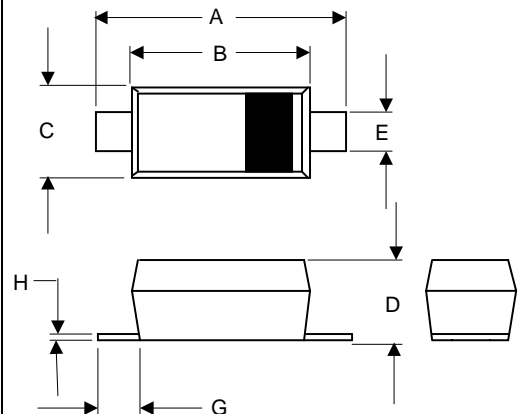
Mechanical Data

- Packaging: Powerlite-123
- Marking Code: SM5817PL---K2; SM5818PL---K3 ; SM5819PL---K4
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings

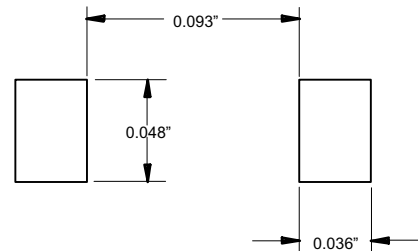
Symbol	Rating	Rating	Unit
V_{RMS}	Maximum RMS Voltage	SM5817PL	14
		SM5818PL	21
		SM5819PL	28
V_{RRM}	Repetitive Reverse Voltage	SM5817PL	20
		SM5818PL	30
		SM5819PL	40
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^{\circ}C$	1.0	A
I_{FSM}	Surge Forward Current at $T_L=70^{\circ}C, 8.3ms$	30	A
$R_{\theta JL}$	Typical Thermal Resistance ⁽¹⁾	80	$^{\circ}C / W$
T_J	Junction Temperature	-65 to +125	$^{\circ}C$
T_{STG}	Storage Temperature	-65 to +125	$^{\circ}C$

Powerlite-123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	----	.20	

SUGGESTED SOLDER PAD LAYOUT



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
				@ $T_A=100^{\circ}C$	9.0

C_j	Typical Junction Capacitance @ $f=1.0MHz, V_r=4V$	---	110	---	pF

Tnote: Thermal Resistance: PC Board Mounted on 0.2*0.2"(5*5mm) copper pad area.

Fig. 1-TYPICAL FORWARD CURRENT

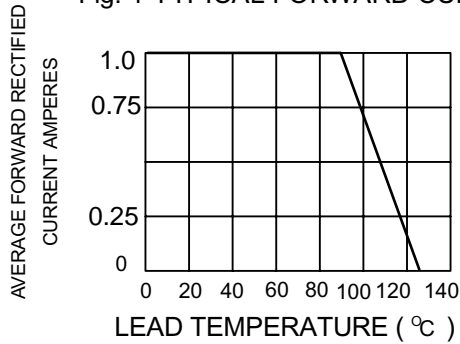


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

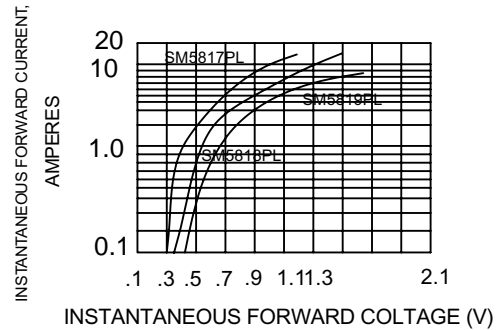


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

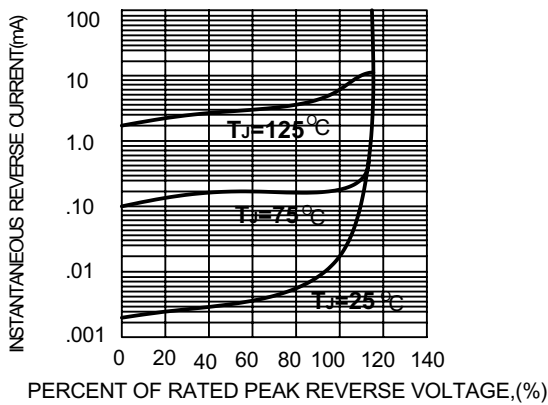


Fig. 4-FORWARD SURGE CURRENT

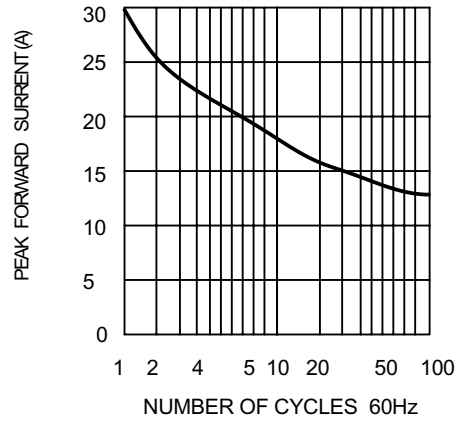
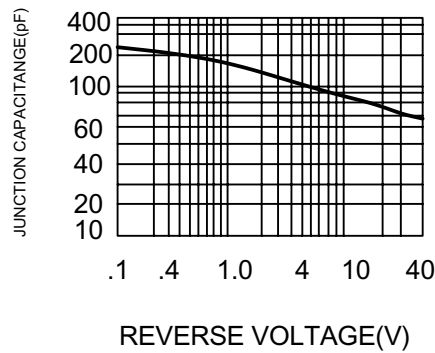


Fig. 5-TYPICAL JUNCTION CAPACITANCE





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