

SM5817PL THRU SM5819PL

Schottky Barrier Diodes 20 to 40 Volts

Features

- High Surge Capability
- Low Forward Voltage
- Low Profile Package
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

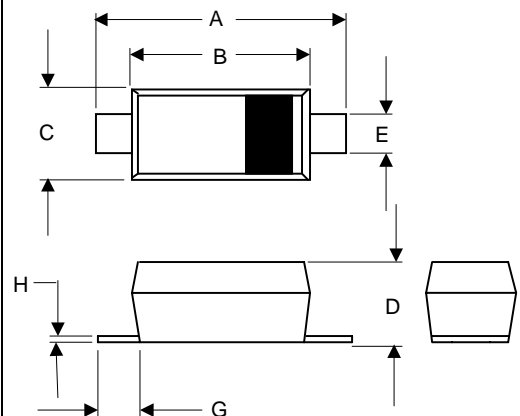
Mechanical Data

- Packaging: Powerlite-123
- Marking Code: SM5817PL---K2; SM5818PL---K3 ; SM5819PL---K4
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

Maximum Ratings

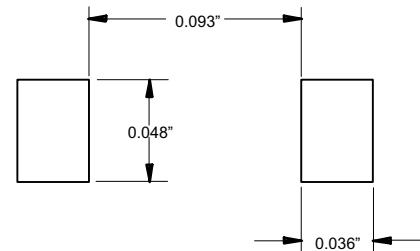
Symbol	Rating	Rating	Unit
V_{RMS}	Maximum RMS Voltage	SM5817PL	14
		SM5818PL	21
		SM5819PL	28
V_{RRM}	Repetitive Reverse Voltage	SM5817PL	20
		SM5818PL	30
		SM5819PL	40
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^\circ C$	1.0	A
I_{FSM}	Surge Forward Current at $T_L=70^\circ C, 8.3ms$	30	A
$R_{\theta JL}$	Typical Thermal Resistance(Note2)	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		---	0.1	---	
					@ $T_A=25^\circ C$	---
					@ $T_A=100^\circ C$	---
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.

SM5817PL-SM5819PL

Fig. 1-TYPICAL FORWARD CURRENT

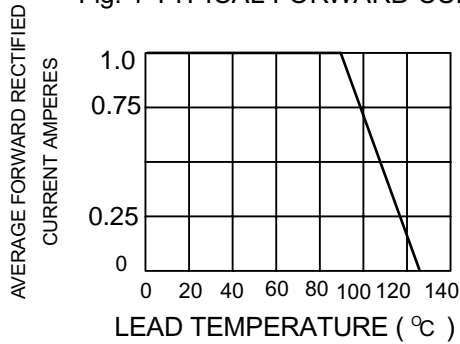


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

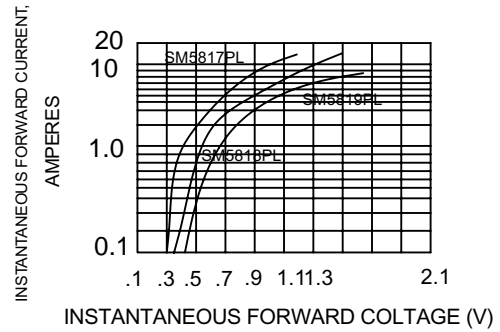


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

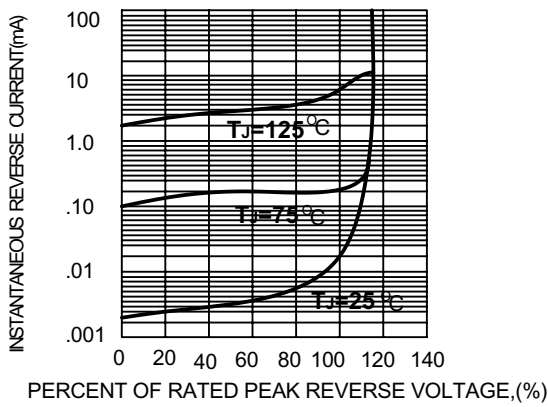


Fig. 4-FORWARD SURGE CURRENT

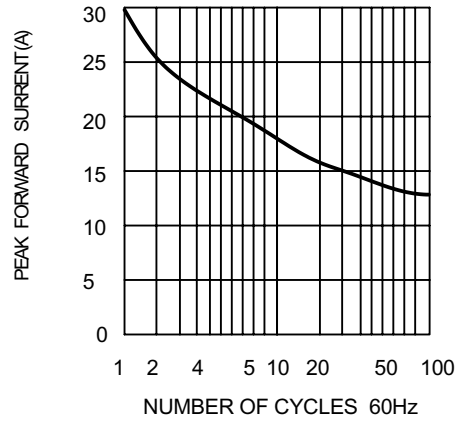
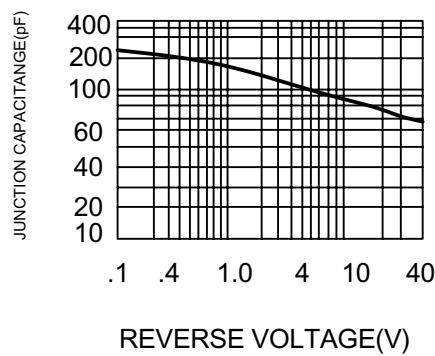


Fig. 5-TYPICAL JUNCTION CAPACITANCE



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;2.5Kpcs/Reel