



Micro Commercial Components

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# SMD22PL SMD24PL

## Schottky Barrier Diodes 20 to 40 Volts

### Features

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

### Mechanical Data

- Packaging: Powerlite-123
- Marking Code: SMD22PL--M2  
SMD24PL--M4

### Maximum Ratings

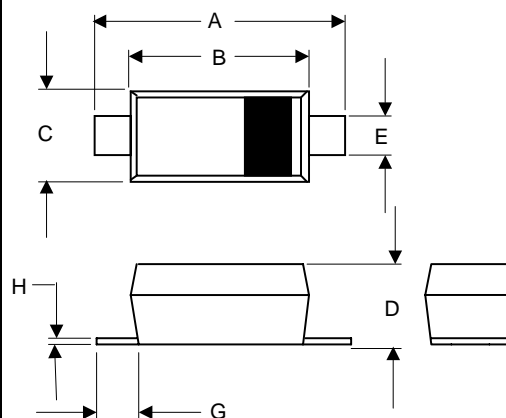
Symbol	Rating	Rating	Unit
$V_{RMS}$	Maximum RMS Voltage	SMD22PL 14 SMD24PL 28	V
$V_{RRM}$	Repetitive Peak Reverse Voltage	SMD22PL 20 SMD24PL 40	V
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^{\circ}C$	2.0	A
$I_{FSM}$	Surge Forward Current at $T_L=70^{\circ}C, 8.3ms$	40	A
$R_{\theta J-L}$	Typical Thermal Resistance <sup>(1)</sup>	80	$^{\circ}C/W$
$T_J$	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 (@2A dc)	---	0.50	---	V
$I_R$	Leakage Current @ $T_A=25^{\circ}C$	SMD22PL	---	1.0	mA
		SMD24PL	---	1.0	mA
	@ $T_A=100^{\circ}C$	SMD22PL	---	10	mA
		SMD24PL	---	10	mA
$C_j$	Typical Junction Capacitance @ $f=1.0MHz, V_r=4V$	---	210	---	pF

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

### 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

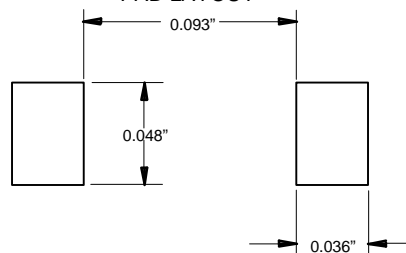


Fig. 1-TYPICAL FORWARD CURRENT

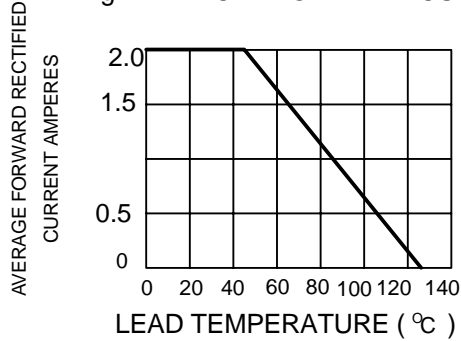


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

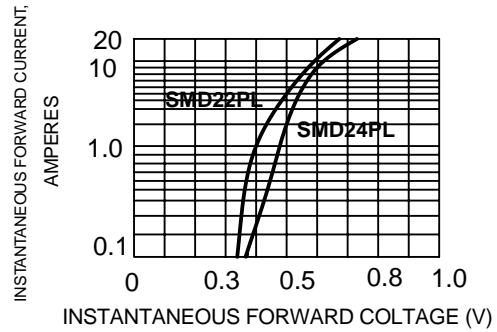


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

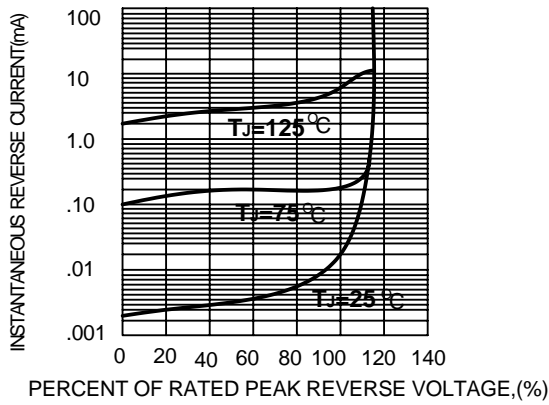


Fig. 4-FORWARD SURGE CURRENT

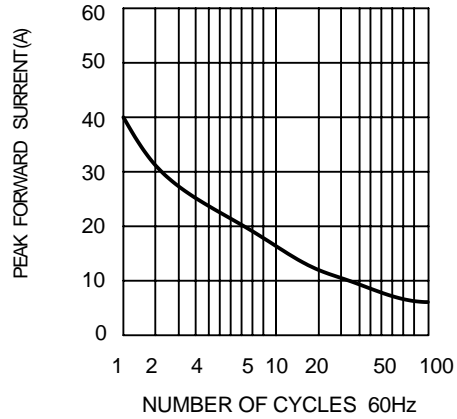


Fig. 5-TYPICAL JUNCTION CAPACITANCE

