

SMD22PL THRU SMD220PL

2 Amp Schottky Barrier Diodes



Features

- High Surge Capability
- Low Forward Voltage
- Low Profile Package
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Mechanical Data

- Packaging: SOD-123FL
- Marking Code: SMD22PL---M2; SMD24PL---M4; SMD26PL---M6
SMD210PL---M10; SMD220PL---M20;

Maximum Ratings

Symbol	Parameter	Rating	Unit
V_{RMS}	Maximum RMS Voltage	SMD22PL 14	V
		SMD24PL 28	
		SMD26PL 42	
		SMD210PL 70	
		SMD220PL 140	
V_{RRM}	Repetitive Peak Reverse Voltage	SMD22PL 20	V
		SMD24PL 40	
		SMD26PL 60	
		SMD210PL 100	
		SMD220PL 200	
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^{\circ}\text{C}$	2.0	A
I_{FSM}	Surge Forward Current, halfsine wave 8.3ms	50	A
$R_{\theta JA}$	Typical Thermal Resistance(Note2)	60	$^{\circ}\text{C/W}$
$R_{\theta JC}$		30	$^{\circ}\text{C/W}$
$R_{\theta JL}$		21	$^{\circ}\text{C/W}$
P_D	Power Dissipation	1.68	W
T_J	Junction Temperature	-65 to +150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-65 to +150	$^{\circ}\text{C}$

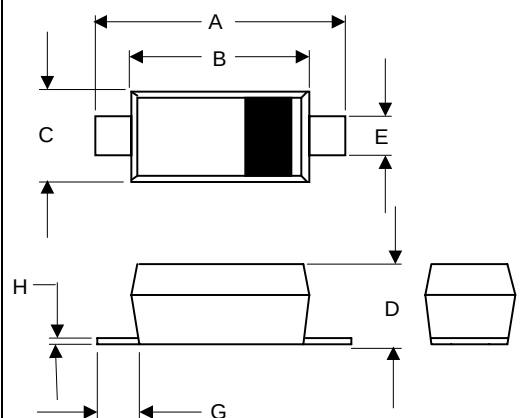
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V_F	Forward Voltage	---	---	0.50	V
	(@2A dc)			0.65	
				0.85	
I_R	Maximum DC Reverse Current	---	---	0.2	mA
C_j	Typical Junction Capacitance @f=1.0MHz, Vr=4V	---	210	---	pF

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

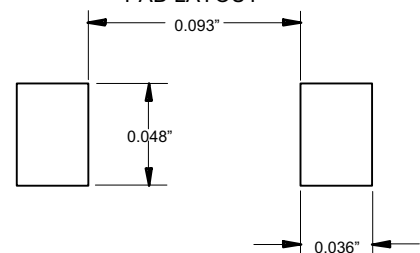
Schottky Barrier Diodes 20 to 200 Volts

SOD-123FL

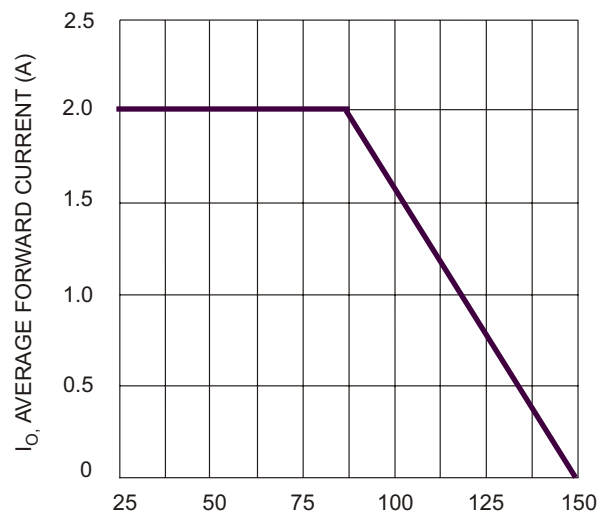


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	----	0.25	----	
H	----	.008	----	.20	

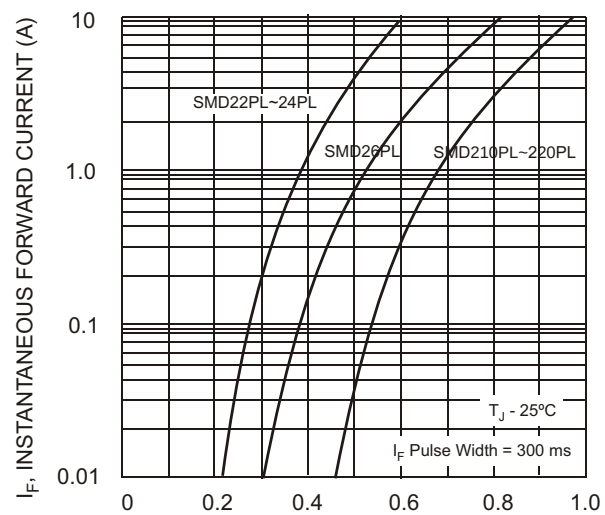
SUGGESTED SOLDER PAD LAYOUT



SMD22PL~SMD220PL



T_L , LEAD TEMPERATURE ($^{\circ}\text{C}$)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics

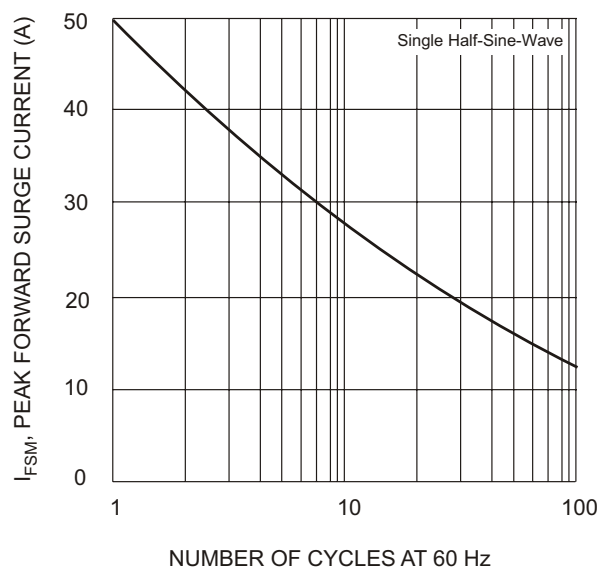


Fig. 3 Max Non-Repetitive Peak Forward Surge Current