

SMD32PL THRU SMD310PL**3 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: SMD32PL---K32; SMD34PL---K34; SMD36PL---K36
SMD38PL---K38; SMD310PL---KA0;

Maximum Ratings

Symbol	Parameter	Rating	Unit
V_{RMS}	Maximum RMS Voltage	SMD32PL	14
		SMD34PL	28
		SMD36PL	42
		SMD38PL	56
		SMD310PL	70
V_{RRM}	Repetitive Peak Reverse Voltage	SMD32PL	20
		SMD34PL	40
		SMD36PL	60
		SMD38PL	80
		SMD310PL	100
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^\circ\text{C}$	3.0	A
I_{FSM}	Surge Forward Current, halfsine wave 8.3ms	75	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	$^\circ\text{C}$

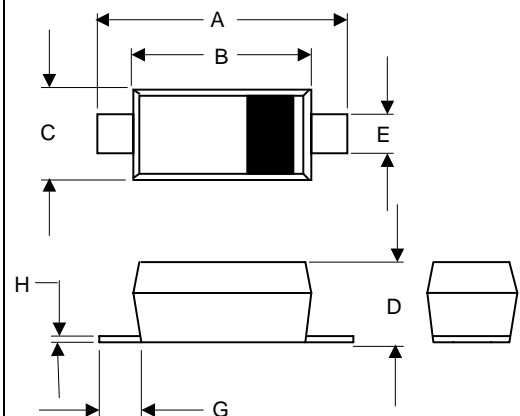
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V_F	Forward Voltage (@2A dc)	SMD32PL~34PL	---	0.50	V
		SMD36PL	---	0.65	
		SMD38PL~310PL	---	0.85	
I_R	Maximum DC Reverse Current	---	---	0.2	mA
C_j	Typical Junction Capacitance @f=1.0MHz, $V_r=4\text{V}$	---	210	---	pF

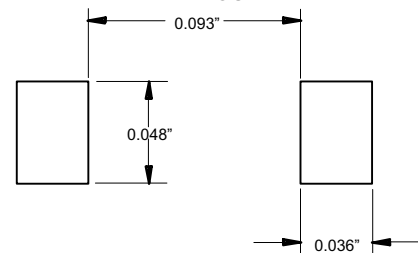
- Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.
2. Thermal Resistance: PC Board Mounted on 0.2" x 0.2" (5" x 5mm) copper pad area.

Schottky Barrier Diodes

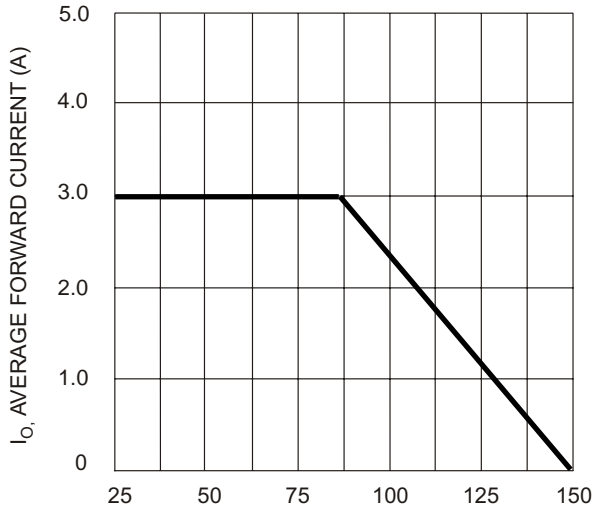
20 to 100 Volts

SOD-123FL

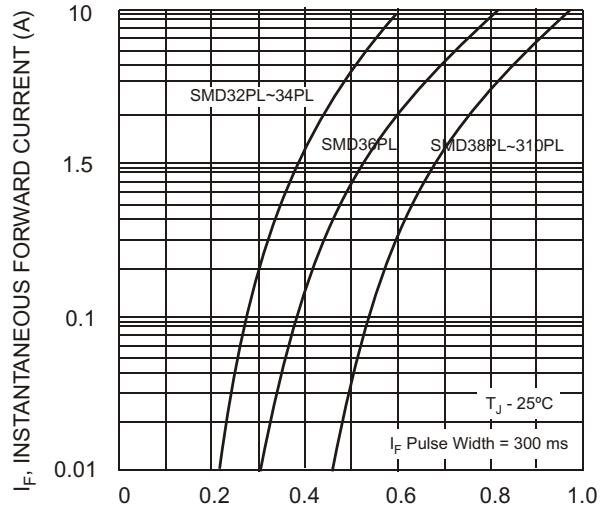
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	----	.20	

SUGGESTED SOLDER PAD LAYOUT

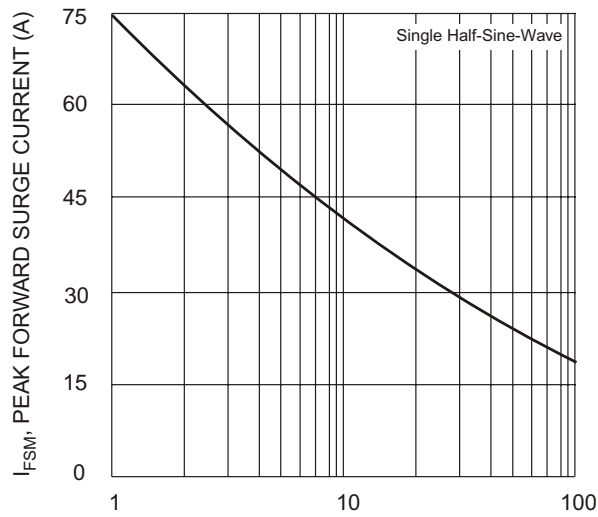
SMD32PL~SMD310PL



T_L , LEAD TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



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



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current