

**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	$^\circ\text{C}$

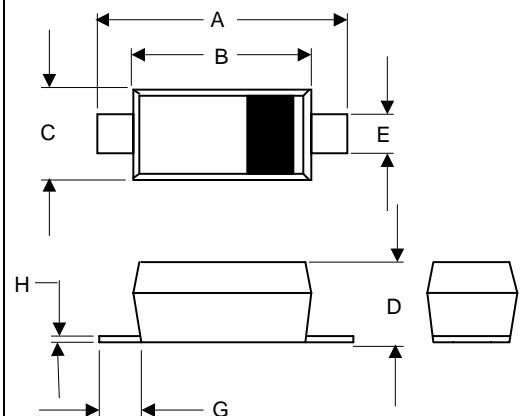
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

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, Vr=4V	---	210	---	pF

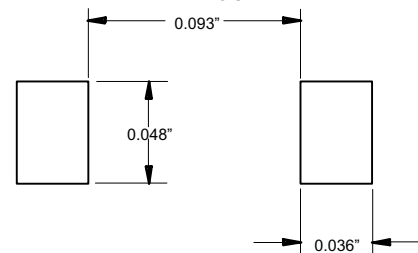
- Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.  
2. Thermal Resistance:PC Board Mounted on 0.2"0.2"(5\*5mm) copper pad area.

## Schottky Barrier Diodes

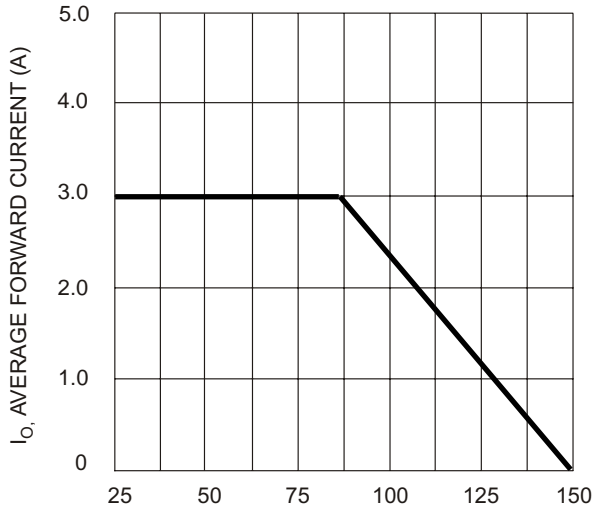
### 20 to 100 Volts

**SOD-123FL**

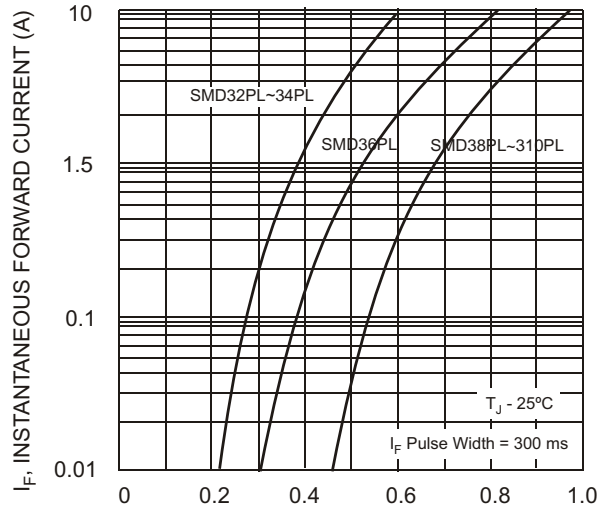
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	----	.20	

**SUGGESTED SOLDER PAD LAYOUT**

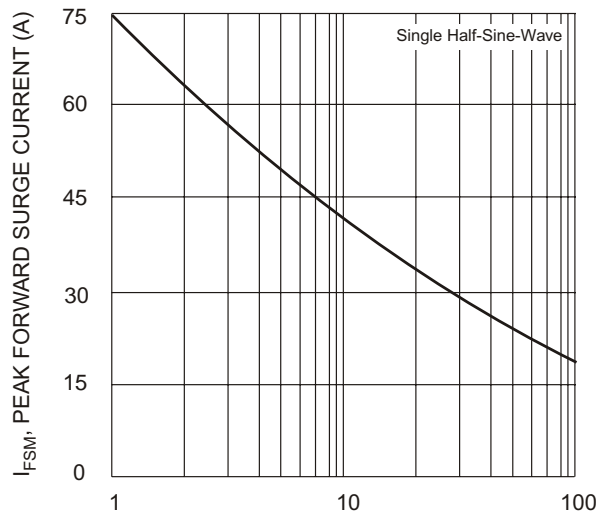
# SMD32PL~SMD310PL



$T_L$ , 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