

# 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	V
		SMD34PL	28	
		SMD36PL	42	
		SMD38PL	56	
		SMD310PL	70	
$V_{RRM}$	Repetitive Peak Reverse Voltage	SMD32PL	20	V
		SMD34PL	40	
		SMD36PL	60	
		SMD38PL	80	
		SMD310PL	100	
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^{\circ}C$	3.0	A	
$I_{FSM}$	Surge Forward Current, halfsine wave 8.3ms	75	A	
$R_{\theta JA}$	Typical Thermal Resistance(Note2)	60	$^{\circ}C/W$	
$R_{\theta JC}$		30	$^{\circ}C/W$	
$R_{\theta JL}$		21	$^{\circ}C/W$	
$P_D$	Power Dissipation	1.68	W	
$T_J$	Junction Temperature	-65 to +150	$^{\circ}C$	
$T_{STG}$	Storage Temperature	-65 to +150	$^{\circ}C$	

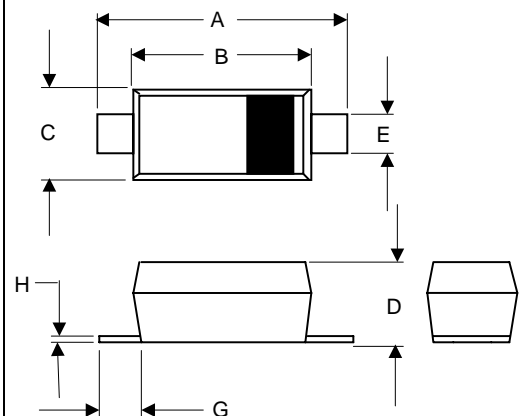
### Electrical Characteristics @ 25°C Unless Otherwise Specified

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.

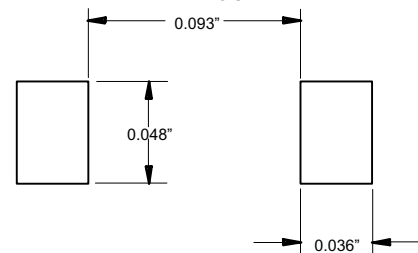
## Schottky Barrier Diodes 20 to 100 Volts

### SOD-123FL

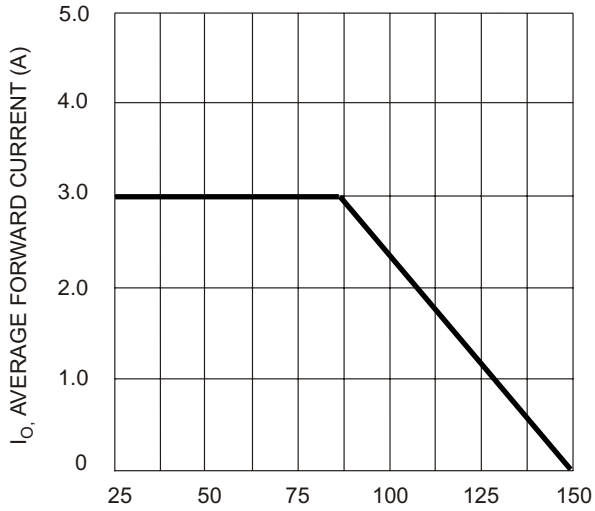


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	-----	0.25	-----	
H	-----	.008	----	.20	

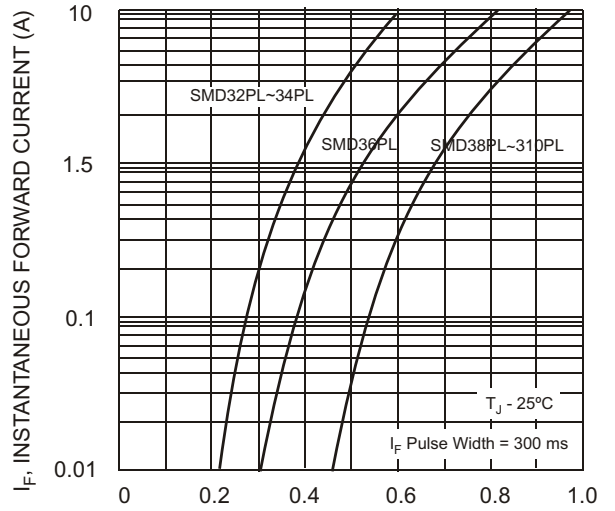
### SUGGESTED SOLDER PAD LAYOUT



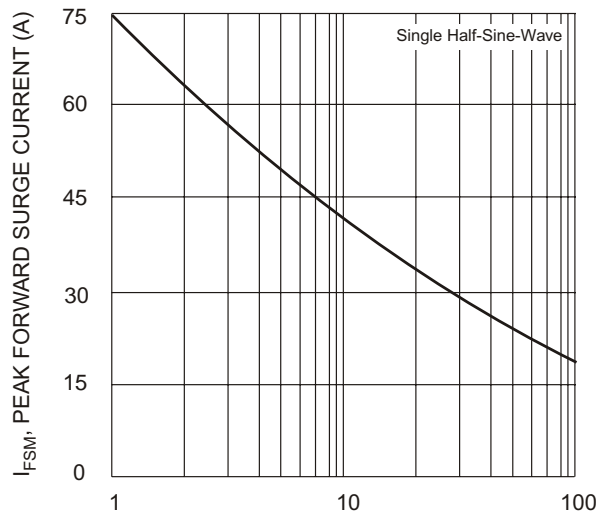
# SMD32PL~SMD310PL



$T_L$ , 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