

3 Amp Schottky Barrier Diodes

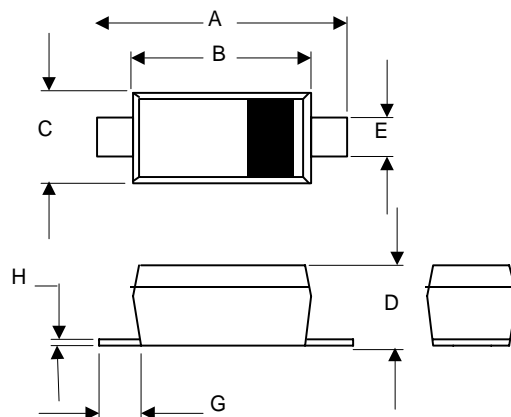
Features:

- 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: KWSMD32PL---K32; KWSMD34PL---K34;
KWSMD36PL---K36; KWSMD38PL---K38;
KWSMD310PL---KA0;

SOD-123FL

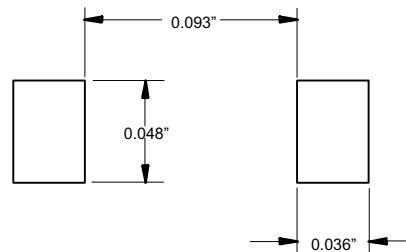


Maximum Ratings

Symbol	Parameter	Rating	Unit	
V_{RMS}	Maximum RMS Voltage	KWSMD32PL	14	V
		KWSMD34PL	28	
		KWSMD36PL	42	
		KWSMD38PL	56	
		KWSMD310PL	70	
V_{RRM}	Repetitive Peak Reverse Voltage	KWSMD32PL	20	V
		KWSMD34PL	40	
		KWSMD36PL	60	
		KWSMD38PL	80	
		KWSMD310PL	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	$^{\circ}C$	

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	

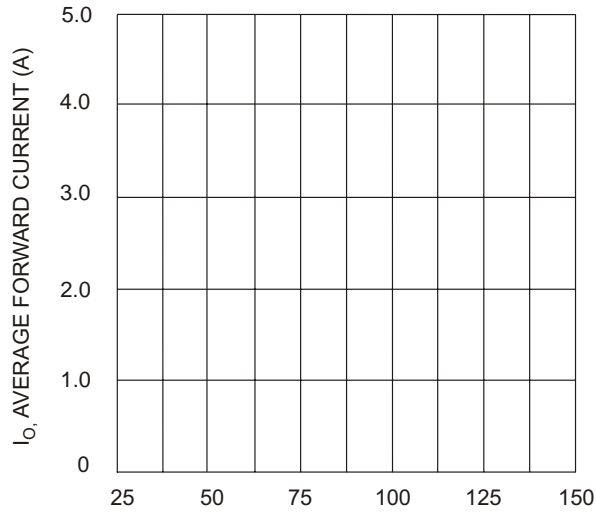
SUGGESTED SOLDER PAD LAYOUT



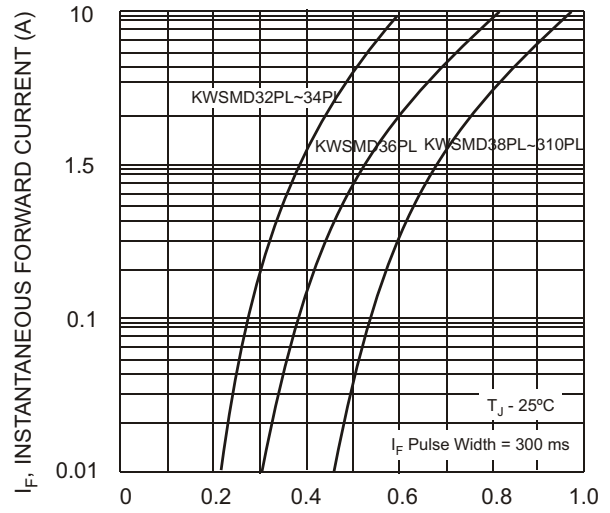
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V_F	Forward Voltage (@2A dc)	KWSMD32PL~34PL	---	0.50	V
		KWSMD36PL	---	0.65	
		KWSMD38PL~310PL	---	0.85	
I_R	Maximum DC Reverse Current	---	---	0.2	mA
C_j	Typical Junction Capacitance @f=1.0MHz, $V_r=4V$	---	210	---	pF

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



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



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

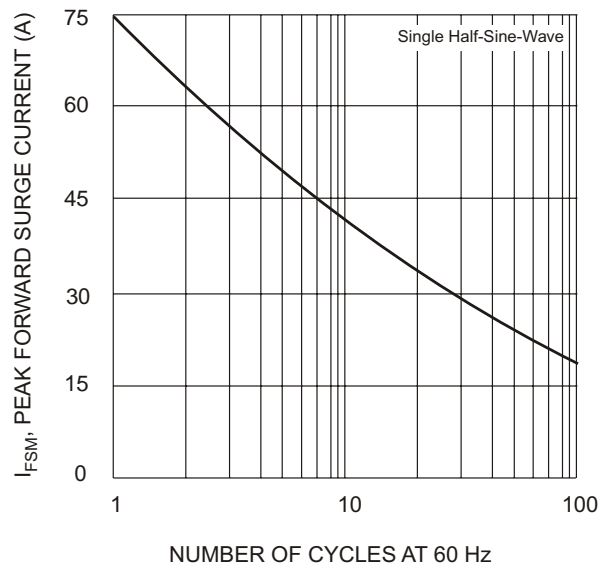


Fig. 3 Max Non-Repetitive Peak Forward Surge Current