

## 2 Amp Schottky Barrier Diodes

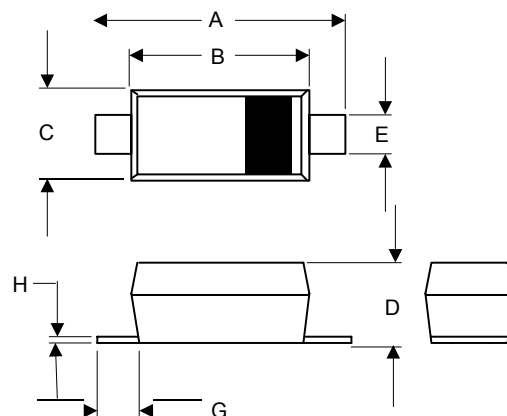
### Features:

- High Surge Capability
- Low Forward Voltage
- Low Profile Package
- Lead Free Finish/Rohs Compliant (Note 1) ("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: KWSMD22PL---K22;KWSMD23PL---K23;  
 KWSMD24PL---K24; KWSMD26PL---K26;  
 KWSMD210PL---K210;KWSMD220PL---K220;

### SOD-123FL

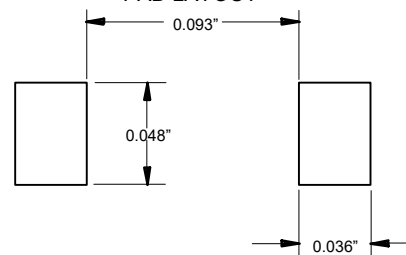


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	.037	.053	0.95	1.35	
E	.020	.039	0.50	1.00	
G	.010	----	0.25	----	
H	----	.008	----	.20	

### Maximum Ratings

Symbol	Parameter	Rating	Unit
$V_{RMS}$	Maximum RMS Voltage	KWSMD22PL	14
		KWSMD23PL	21
		KWSMD24PL	28
		KWSMD26PL	42
		KWSMD210PL	70
		KWSMD220PL	140
$V_{RRM}$	Repetitive Peak Reverse Voltage	KWSMD22PL	20
		KWSMD23PL	30
		KWSMD24PL	40
		KWSMD26PL	60
		KWSMD210PL	100
		KWSMD220PL	200
$I_{F(AV)}$	Rectified Current (Average) Half Wave $^{\circ}C$ Rectification with Resist. Load at $T_L=90$	2.0	A
$I_{FSM}$	Surge Forward Current, halfsine wave 8.3ms	60	A
$R_{thJA}$	Typical Thermal Resistance(Note 2)	60	$^{\circ}C/W$
$R_{thJC}$		30	$^{\circ}C/W$
$R_{thJL}$		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	$^{\circ}C$

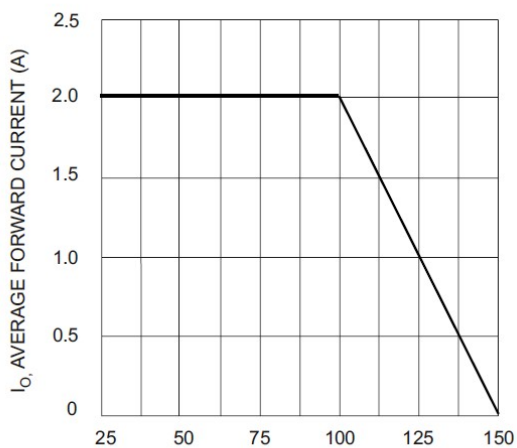
### SUGGESTED SOLDER PAD LAYOUT



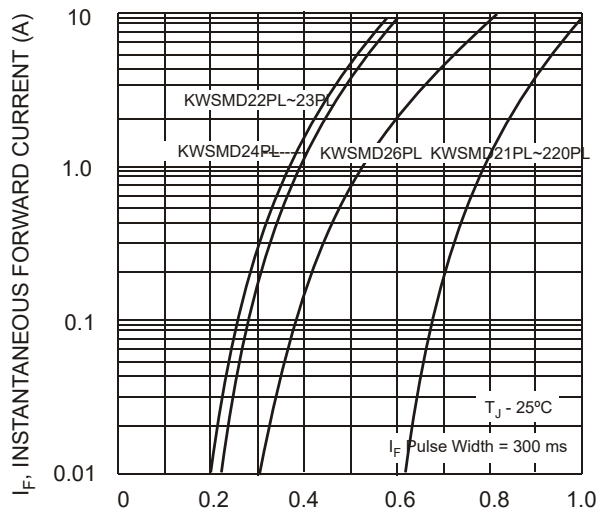
### Electrical Characteristics @ 25 $^{\circ}C$ Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
$V_F$	Forward Voltage (@2A dc)	KWSMD22PL~23PL	---	0.45	V
		KWSMD24PL	---	0.50	
		KWSMD26PL	---	0.65	
		KWSMD210PL~220PL	---	0.85	
$I_R$	Maximum DC Reverse Current	---	---	0.2	mA
$C_j$	Typical Junction Capacitance @f=1.0MHz, Vr=4V	---	210	---	pF

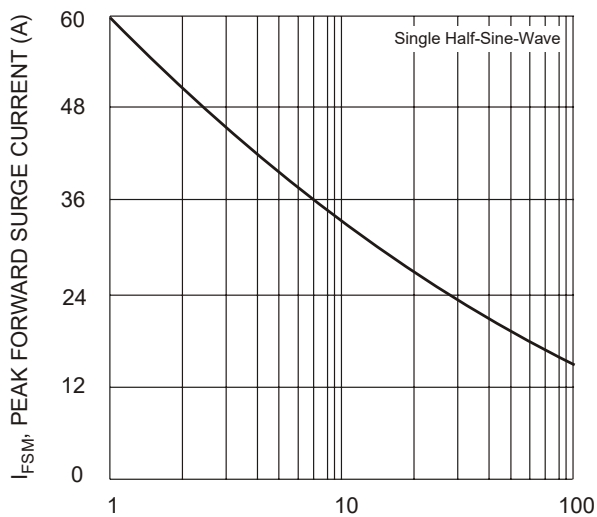
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.  
 2. Thermal Resistance:PC Board Mounted on 0.2\*0.2"(5\*5mm) copper pad area.



$T_L$ , 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