



Micro Commercial Components



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### Features

- Halogen free available upon request by adding suffix "-HF"
- 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: SMD2150PL---M15; SMD220PL---M20;

### Maximum Ratings

Symbol	Parameter	Rating	Unit
$V_{RMS}$	Maximum RMS Voltage SMD2150PL SMD220PL	105 140	V
$V_{RRM}$	Repetitive Peak Reverse Voltage SMD2150PL SMD220PL	150 200	V
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_L=90^\circ C$	2.0	A
$I_{FSM}$	Surge Forward Current, halfsine wave 8.3ms	50	A
$I_{FRM}$	Peak Repetitive Forward Current (Rated $V_R$ , Square Wave, 20 kHz, $T_C = 105^\circ C$ )	4.0	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

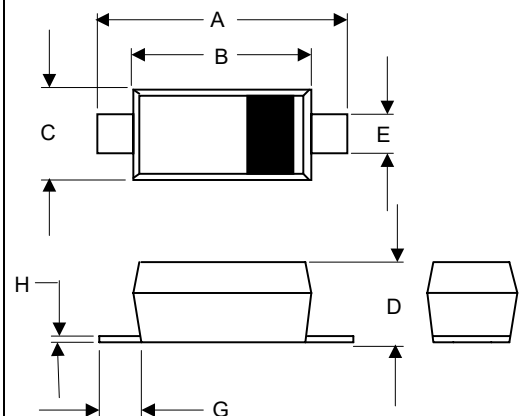
Symbol	Parameter	Min	Typ	Max	Units
$V_F$	Forward Voltage (@2A dc)	---	---	0.90	V
$I_R$	Maximum DC Reverse Current	---	---	0.5	mA
$C_j$	Typical Junction Capacitance @f=1.0MHz, $V_r=4V$	---	210	---	pF

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

# SMD2150PL THRU SMD220PL

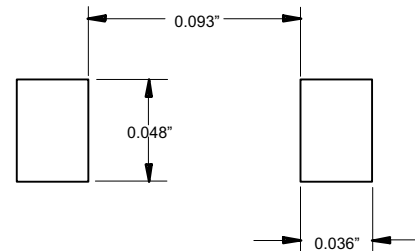
## Schottky Barrier Diodes 150 to 200 Volts

### SOD-123FL



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.122	2.55	3.10	
C	.055	.075	1.40	1.90	
D	.035	.047	0.90	1.20	
E	.020	.041	0.50	1.05	
G	.010	----	0.25	----	
H	----	.010	----	0.25	

### SUGGESTED SOLDER PAD LAYOUT



# SMD215PL~SMD220PL

Fig.1 Forward Current Derating Curve

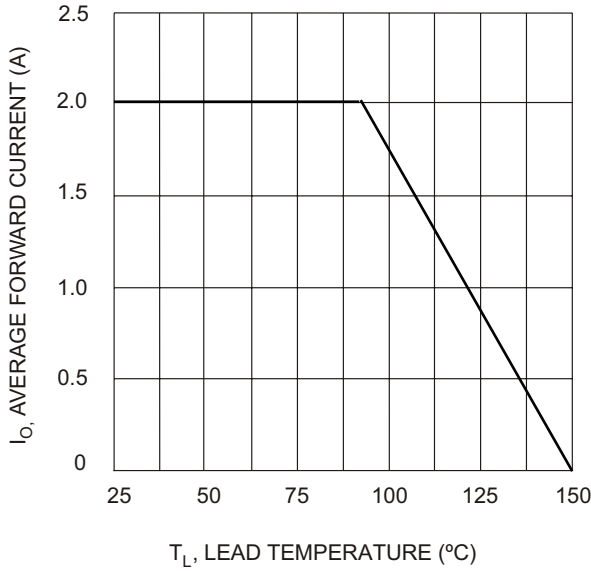


Fig.2 Max Non-Repetitive Peak Forward Surge Current

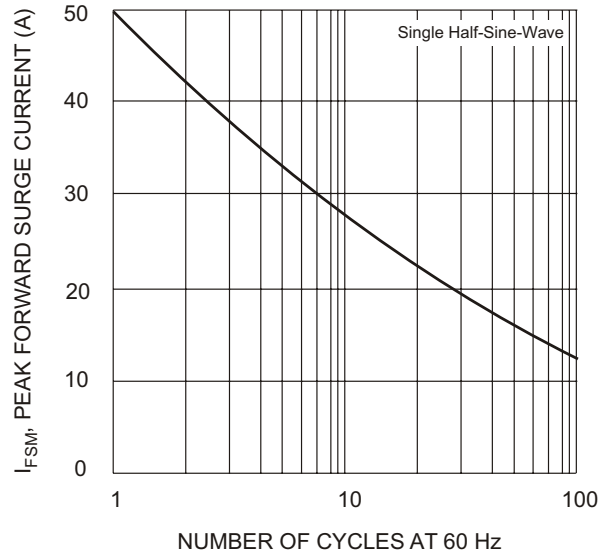


Fig.3 Typical Forward Voltage

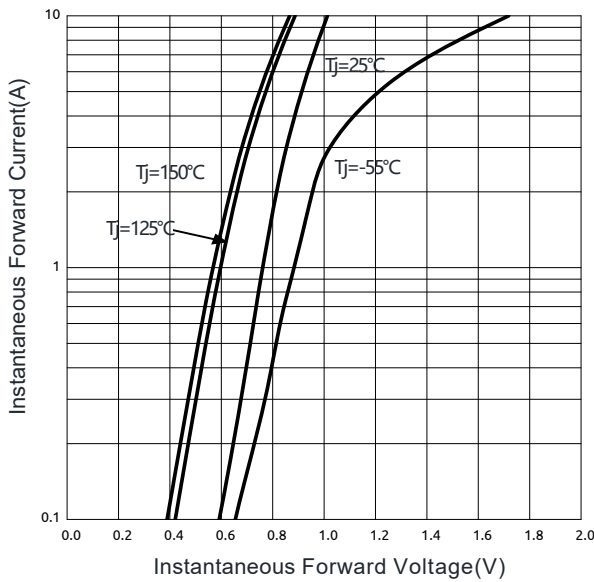
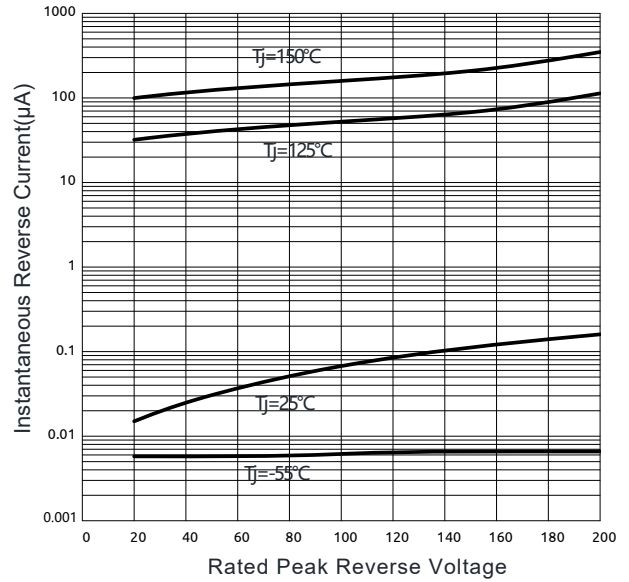


Fig.4 Typical Reverse Characteristics





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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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