

SMD22PL THRU SMD210PL

Schottky Barrier Diodes 20 to 100 Volts

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

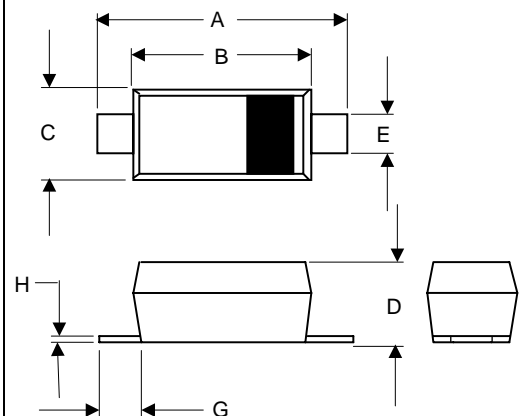
Mechanical Data

- Packaging: SOD-123FL
- Marking Code: SMD22PL---M2; SMD24PL---M4; SMD26PL---M6
 SMD28PL---M8; SMD210PL---M10;

Maximum Ratings

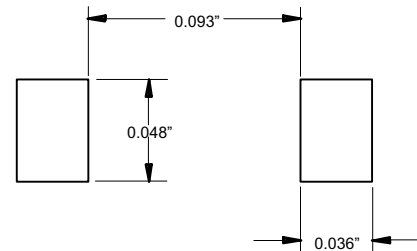
| Symbol | Parameter | Rating | Unit |
|--------------------|---|-------------|------|
| V _{RMS} | Maximum RMS Voltage | SMD22PL | 14 |
| | | SMD24PL | 28 |
| | | SMD26PL | 42 |
| | | SMD28PL | 56 |
| | | SMD210PL | 70 |
| V _{RRM} | Repetitive Peak Reverse Voltage | SMD22PL | 20 |
| | | SMD24PL | 40 |
| | | SMD26PL | 60 |
| | | SMD28PL | 80 |
| | | SMD210PL | 100 |
| I _{F(AV)} | Rectified Current (Average) Half Wave Rectification with Resist. Load at T _L =90°C | 2.0 | A |
| I _{FSM} | Surge Forward Current, halfsine wave 8.3ms | 50 | A |
| R _{thJA} | Typical Thermal Resistance(Note2) | 60 | °C/W |
| R _{thJC} | | 30 | °C/W |
| R _{thJL} | | 21 | °C/W |
| P _D | Power Dissipation | 1.68 | W |
| T _J | Junction Temperature | -65 to +125 | °C |
| T _{STG} | Storage Temperature | -65 to +125 | °C |

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 | .053 | 0.90 | 1.35 | |
| E | .020 | .041 | 0.50 | 1.05 | |
| G | .010 | ----- | 0.25 | ----- | |
| H | ----- | .010 | ----- | .25 | |

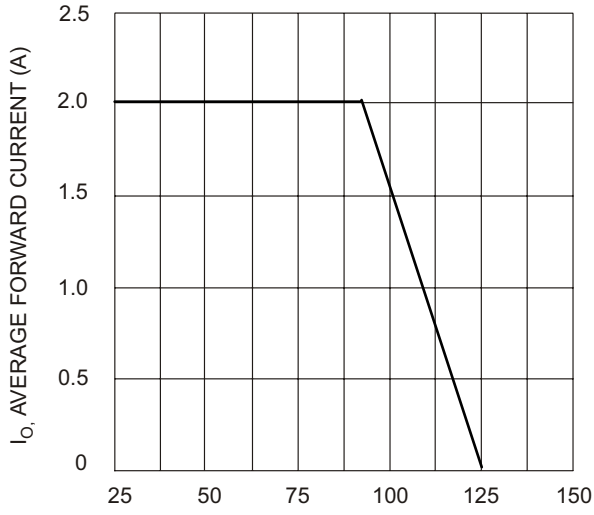
SUGGESTED SOLDER PAD LAYOUT



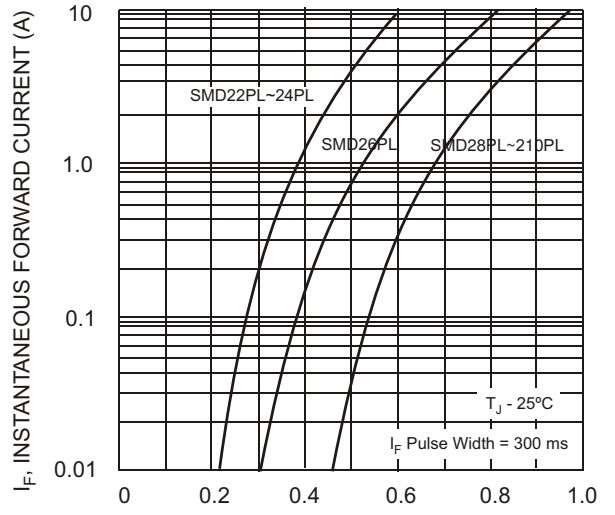
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Units |
|----------------|--|---------------|-----|-----|-------|
| V _F | Forward Voltage (@2A dc) | SMD22PL~24PL | --- | --- | 0.50 |
| | | SMD26PL | --- | --- | 0.70 |
| | | SMD28PL~210PL | --- | --- | 0.85 |
| 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 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

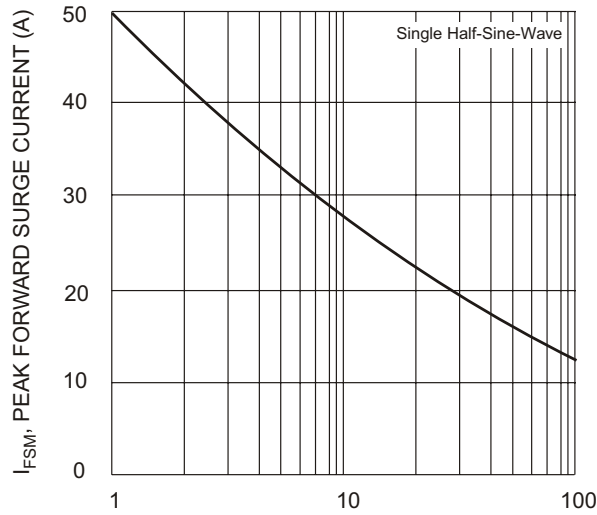


Fig. 3 Max Non-Repetitive Peak Forward Surge Current



Micro Commercial Components

Ordering Information :

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

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.