

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

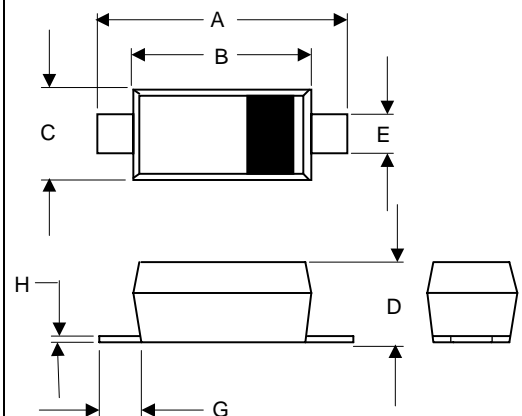
| Symbol | Parameter | Rating | Unit |
|--------------------|---|-------------|------|
| V _{RMS} | Maximum RMS Voltage | SMD22PL | 14 |
| | | SMD24PL | 28 |
| | | SMD26PL | 42 |
| | | SMD28PL | 56 |
| | | SMD210PL | 70 |
| V _{RRM} | Repetitive Peak Reverse Voltage | SMD22PL | 20 |
| | | SMD24PL | 40 |
| | | 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 |

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

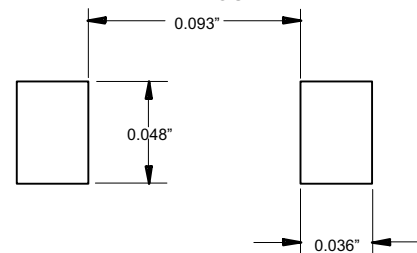
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.
2. Thermal Resistance: PC Board Mounted on 0.2" x 0.2" (5" x 5mm) copper pad area.

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



SMD22PL~SMD210PL

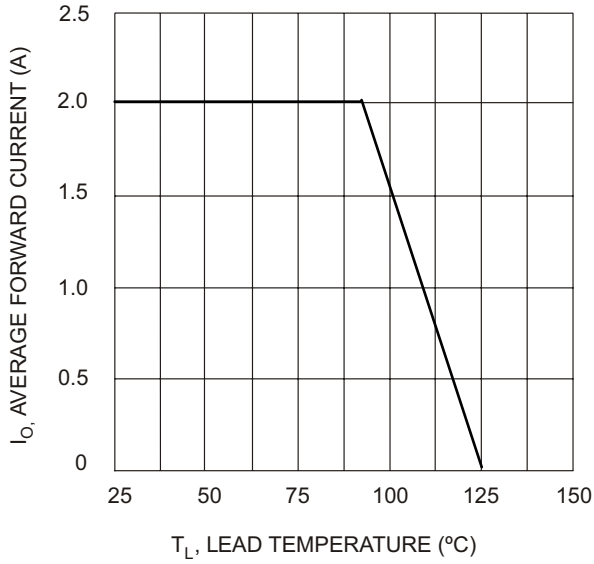


Fig. 1 Forward Current Derating Curve

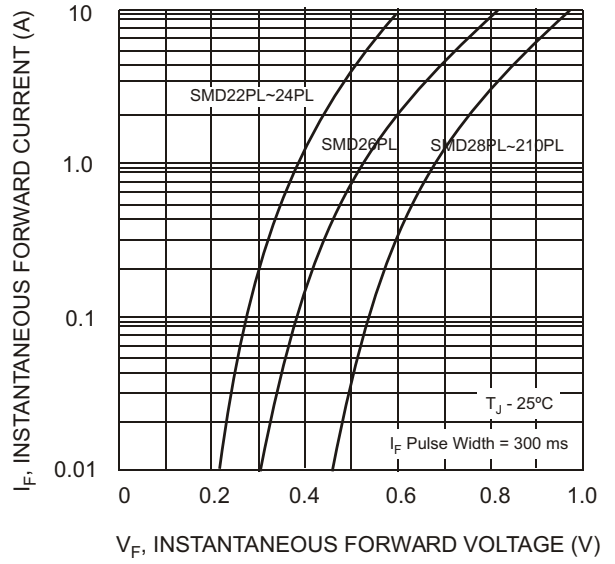


Fig. 2 Typical Forward Characteristics

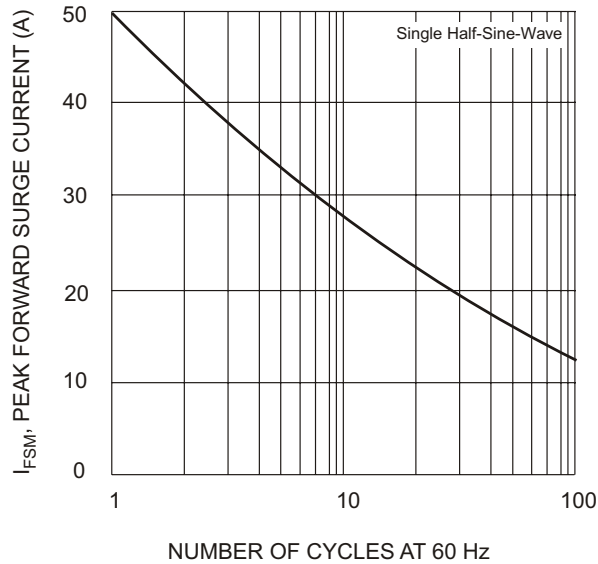


Fig. 3 Max Non-Repetitive Peak Forward Surge Current



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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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