



THE DATASHEET OF SMD210PL-TP



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

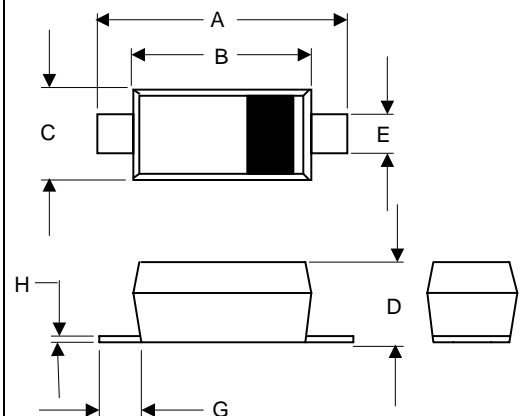
| Symbol | Parameter | Rating | Unit | |
|---|--|------------------|---------------|-------------|
| V_{RMS} | Maximum RMS Voltage | SMD22PL | 14 | V |
| | | SMD24PL | 28 | |
| | | SMD26PL | 42 | |
| | | SMD28PL | 56 | |
| | | SMD210PL | 70 | |
| V_{RRM} | Repetitive Peak Reverse Voltage | SMD22PL | 20 | V |
| | | SMD24PL | 40 | |
| | | SMD26PL | 60 | |
| | | SMD28PL | 80 | |
| | | SMD210PL | 100 | |
| $I_{F(AV)}$ | 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 | |
| $R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$ | Typical Thermal Resistance(Note2) | 60 | $^{\circ}C/W$ | |
| | | 30 | $^{\circ}C/W$ | |
| | | 21 | $^{\circ}C/W$ | |
| P_D | Power Dissipation | 1.68 | W | |
| T_J, T_{stg} | Junction and Storage Temperature | SMD22PL~SMD26PL | -65 to +125 | $^{\circ}C$ |
| | | SMD28PL~SMD210PL | -65 to +150 | $^{\circ}C$ |

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 |

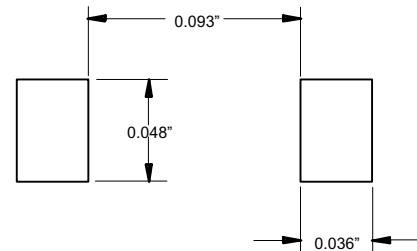
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.
2. Thermal Resistance:PC Board Mounted on 0.2"0.2"(5*5mm) copper pad area.

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



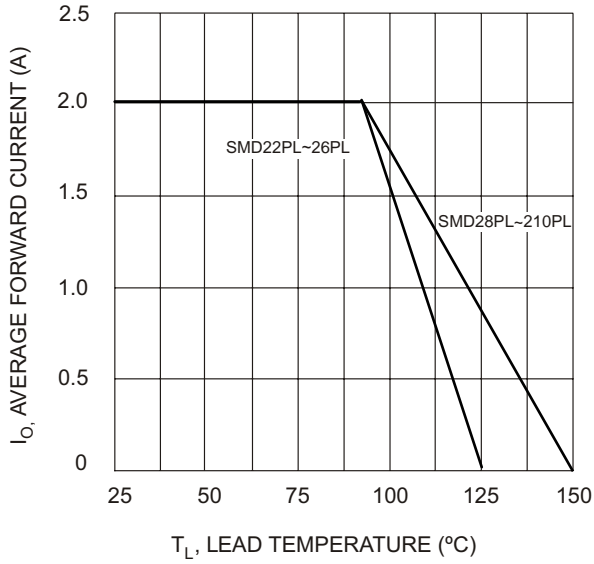


Fig. 1 Forward Current Derating Curve

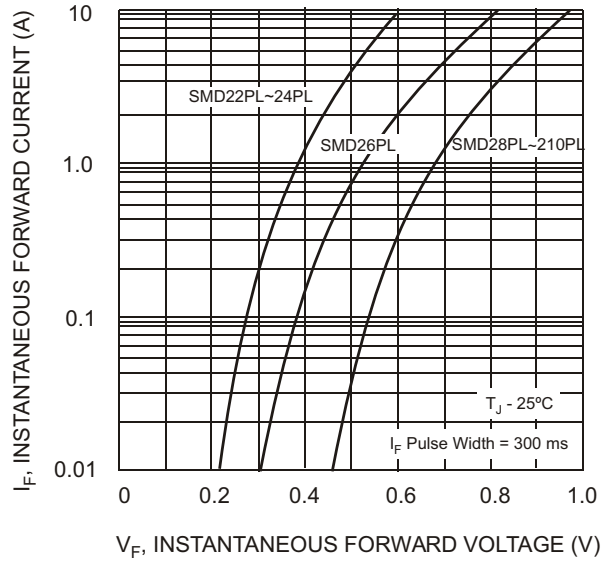


Fig. 2 Typical Forward Characteristics

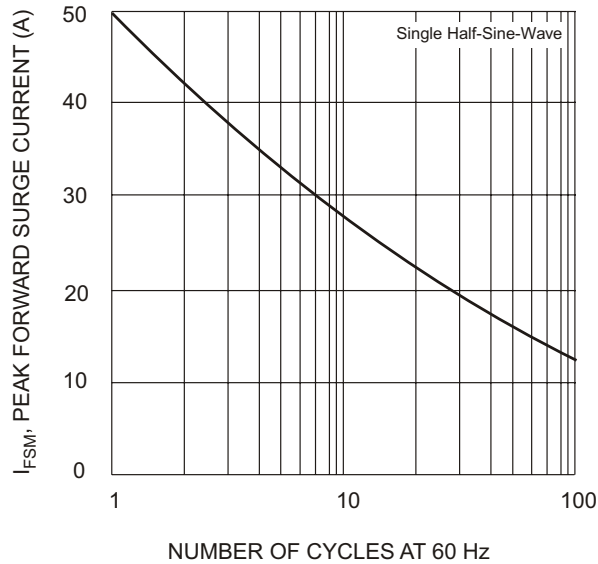


Fig. 3 Max Non-Repetitive Peak Forward Surge Current



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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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