

# 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

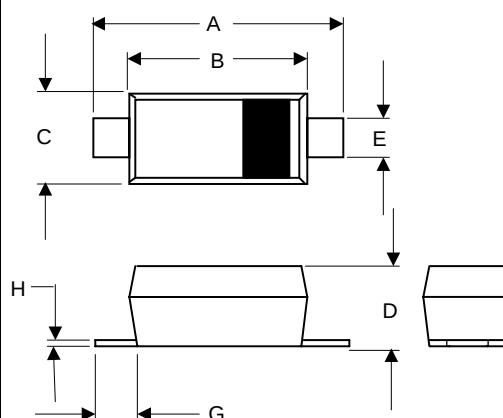
| Symbol          | Parameter                                                                                  | Rating                                                      | Unit          |
|-----------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------|
| $V_{RMS}$       | 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             |
| $R_{\theta JA}$ | 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             |
| $T_J, T_{stg}$  | Junction and Storage Temperature                                                           | SMD22PL~SMD26PL -65 to +125<br>SMD28PL~SMD210PL -65 to +150 | $^{\circ}C$   |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter                                     | Min | Typ | Max  | Units |
|--------|-----------------------------------------------|-----|-----|------|-------|
| $V_F$  | Forward Voltag SMD22PL~24PL                   | --- | --- | 0.50 | V     |
|        | (@2A dc)                                      | --- | --- | 0.70 |       |
|        | SMD26PL                                       | --- | --- | 0.85 |       |
| $I_R$  | Maximum DC Reverse Current                    | --- | --- | 0.5  | mA    |
| $C_j$  | Typical Junction Capacitance @f=1.0MHz, Vr=4V | --- | 210 | ---  | pF    |

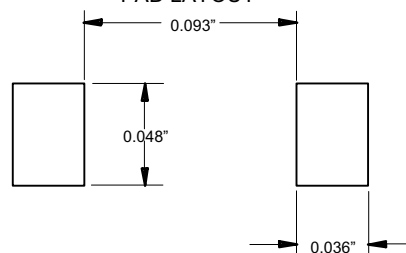
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.  
2. Thermal Resistance:PC Board Mounted on 0.2\*0.2"(5\*5mm) copper pad area.

### SOD-123FL

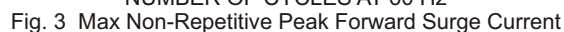
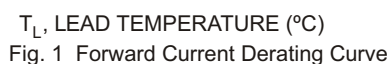


| DIM | INCHES |      | MM   |      | NOTE |
|-----|--------|------|------|------|------|
|     | MIN    | MAX  | MIN  | MAX  |      |
| A   | .140   | .152 | 3.55 | 3.85 |      |
| B   | .100   | .122 | 2.55 | 3.10 |      |
| C   | .055   | .075 | 1.40 | 1.90 |      |
| D   | .035   | .053 | 0.90 | 1.35 |      |
| E   | .020   | .041 | 0.50 | 1.05 |      |
| G   | .010   | ---- | 0.25 | ---- |      |
| H   | ----   | .010 | ---- | .25  |      |

### SUGGESTED SOLDER PAD LAYOUT



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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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