

5.0kV 270mA HIGH VOLTAGE DIODES

HIGH VOLTAGE SURFACE MOUNT
DIODES - SM & SP SERIES

Features

- High speed switching
- High Current
- High surge resistivity for CRT discharge
- High reliability design
- High Voltage

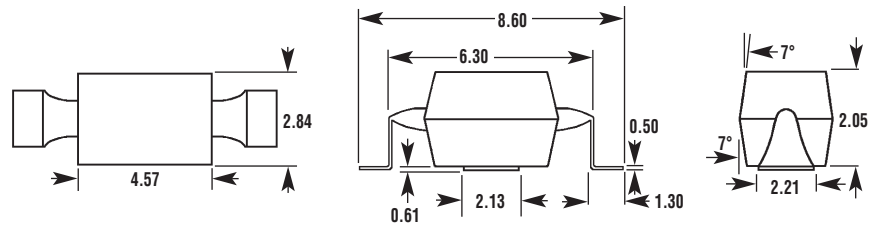
Applications

- X light Power supply
- Laser
- Voltage doubler circuit
- Microwave emission power

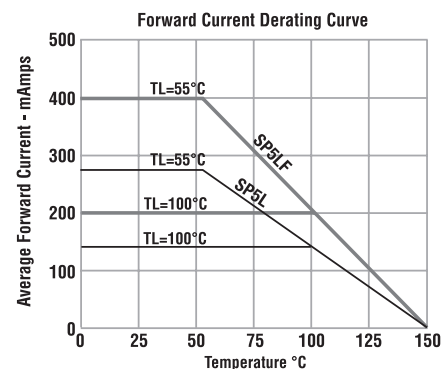
Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Outline Drawings : mm



Derating Curves



| Items | Symbols | Condition | SP5LG | Units |
|--------------------------------------|-----------|---|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | | 5.0 | kV |
| Average Output Current | I_o | $T_a=25^\circ\text{C}$, Resistive Load | 270 | mA |
| Surge Current | I_{FSM} | | 10 | A peak |
| Junction Temperature | T_j | | 150 | $^\circ\text{C}$ |
| Allowable Operation Case Temperature | T_c | | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ\text{C}$ |

- Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

| Items | Symbols | Conditions | SP5LG | Units |
|-------------------------------|----------|---|-------|---------------|
| Maximum Forward Voltage Drop | V_F | at 25°C , $I_F = I_{F(AV)}$ | 14 | V |
| Maximum Reverse Current | I_{R1} | at 25°C , $V_R = V_{RRM}$ | 0.1 | μA |
| | I_{R2} | at 100°C , $V_R = V_{RRM}$ | 10 | μA |
| Maximum Reverse Recovery Time | T_{rr} | at 25°C | 75 | nS |
| Junction Capacitance | C_j | at 25°C , $V_R=0\text{V}$, $f=1\text{MHz}$ | 5.0 | pF |