

5.0kV 270mA HIGH VOLTAGE DIODES

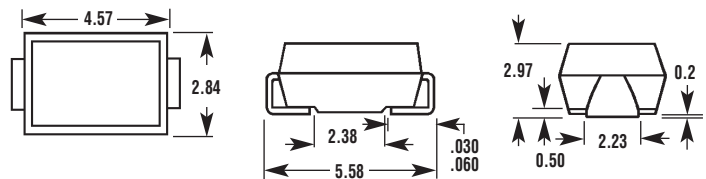
Outline Drawings : mm

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



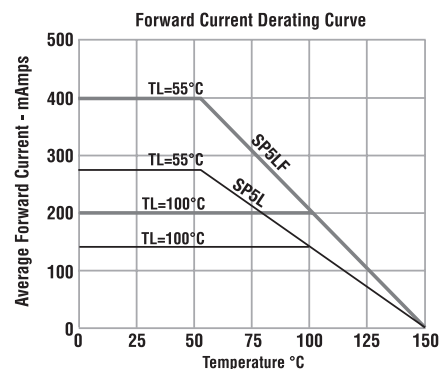
Applications

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

Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Derating Curves



Items	Symbols	Condition	SP5L	Units
Repetitive Peak Reverse Voltage	V_{RRM}		5.0	kV
Average Output Current	I_o	$T_a=25^{\circ}C$, Resistive Load	270	mA
Surge Current	I_{FSM}		10	A peak
Junction Temperature	T_j		150	$^{\circ}C$
Allowable Operation Case Temperature	T_c		150	$^{\circ}C$
Storage Temperature	T_{stg}		-55 to +150	$^{\circ}C$

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

Items	Symbols	Conditions	SP5L	Units
Maximum Forward Voltage Drop	V_F	at $25^{\circ}C$, $I_F = I_{F(AV)}$	14	V
Maximum Reverse Current	I_{R1}	at $25^{\circ}C$, $V_R = V_{RRM}$	0.1	μA
	I_{R2}	at $100^{\circ}C$, $V_R = V_{RRM}$	10	μA
Maximum Reverse Recovery Time	T_{rr}	at $25^{\circ}C$	75	nS
Junction Capacitance	C_j	at $25^{\circ}C$, $V_R=0V$, $f=1MHz$	5.0	pF