



SMA Package Voltages up to 8kV

Currents up to 900mA

Part Number	Repetitive Peak Reverse Voltage V_{RRM} V	Average Forward Current Max. $I_{FAVM}@T_L=55^\circ\text{C}$ mA	Average Forward Current Max. $I_{FAVM}@T_L=100^\circ\text{C}$ mA	Maximum Forward Voltage Drop $V_F@100\text{mA}$ V	Typical Junction Capacitance $C_J@V_R=0\text{ VDC}^1$ (pF)	Maximum Reverse Current $I_{RR}@25^\circ\text{C}$ μA	Maximum Reverse Recovery Time $T_{RR}@25^\circ\text{C}$ nS	Maximum Surge Current I_{FSM}^2 A	Typical Thermal Resistance $R_{\theta JL}$ ($^\circ\text{C}/\text{W}$) ³	
SM & SP Series - High Voltage Surface Mount Diodes					J Lead Devices					Figure 94
SM3F	3000	900	350	3.7	6.0	0.5	65	10	27	
SP3A	3000	750	200	3.2	15.0	0.5	100	15	30	
SP3L	3000	450	110	3.6	9.0	0.5	75	10	17	
SP3S	3000	120	50	3.9	2.5	0.5	75	3	40	
SP5L	5000	270	140	8.5	4.5	0.5	75	10	32	
SP5LF	5000	270	140	7.6	6.8	0.5	50	10	32	
SP5S	5000	40	20	14.0	1.0	0.5	60	3	55	
SM & SP Series - High Voltage Surface Mount Diodes					Gullwing Devices					Figure 95
SM3FG	3000	900	350	3.7	6.0	0.5	65	10	27	
SP3AG	3000	750	200	3.2	15.0	0.5	100	15	30	
SP3LG	3000	450	110	3.6	9.0	0.5	75	10	17	
SP3SG	3000	120	50	3.9	2.5	0.5	75	3	40	
SP5LG	5000	270	140	8.5	4.5	0.5	75	10	32	
SP5LFG	5000	270	140	7.6	7.2	0.5	50	10	32	
SP5SG	5000	40	20	14.0	1.0	0.5	60	3	55	
SP8LG ⁴	8000	100	40	18.0	3.3	0.5	75	10	15	
SP8SG ⁴	8000	40	20	18.0	0.8	0.5	75	3	45	

Notes:

¹ Diode Junction Capacitance is measured at 1 MHz, $V_R=0$ and $T_A=25^\circ\text{C}$

² 1/2 Sine(60Hz) @ 25°C

³ P.C.B. mounted on 0.2" x 0.2" (5.0mm x 5.0mm) copper solder pads

⁴ SP8LG & SP8SG should not be operated at voltages above 5kV in air.

See page 23 for notes on max package operating voltage - V_{RRM} vs package applicability
All devices listed are RoHS compliant.

Derating Curves

