



1 Watt SPH Single and Dual Series



- Efficiency up to 81%
- 1000VDC Isolation
- MTBF > 2,000,000 Hours
- RoHS Compliant



Model Number	Voltage			Current				Load Regulation % (Max)	Input Overvoltage (1000ms) Max (VDC)	Efficiency @ Max Load (% Typ)	Capacitive Load Max (Dual each output)
	Input		Output	Input		Output					
	Nom. (VDC)	Range (VDC)	(VDC)	@ No Load (mA)	@ Max Load (mA)	Min (mA)	Max (mA)				
SPH1F5S3R3	5	4.5 - 5.5	3.3	30	235	5	260	10	9	73	220 µF
SPH1F5S5	5	4.5 - 5.5	5	30	281	4	200	10	9	71	220 µF
SPH1F5S6	5	4.5 - 5.5	6	30	278	3.5	167	10	9	72	220 µF
SPH1F5S7	5	4.5 - 5.5	7	30	274	3	143	10	9	73	220 µF
SPH1F5S9	5	4.5 - 5.5	9	30	260	2	110	8	9	76	220 µF
SPH1F5S12	5	4.5 - 5.5	12	30	258	1.5	84	7	9	78	220 µF
SPH1F5S15	5	4.5 - 5.5	15	30	258	1	67	7	9	78	220 µF
SPH1F5D5	5	4.5 - 5.5	±5	30	278	±2	±100	10	9	72	100 µF
SPH1F5D9	5	4.5 - 5.5	±9	30	262	±1	±56	8	9	77	100 µF
SPH1F5D12	5	4.5 - 5.5	±12	30	258	±0.8	±42	7	9	78	100 µF
SPH1F5D15	5	4.5 - 5.5	±15	30	258	±0.7	±34	7	9	79	100 µF
SPH1F12S3R3	12	10.8 - 13.2	3.3	12	96	5	260	8	18	74	220 µF
SPH1F12S5	12	10.8 - 13.2	5	12	114	4	200	8	18	73	220 µF
SPH1F12S9	12	10.8 - 13.2	9	12	106	2	110	5	18	78	220 µF
SPH1F12S12	12	10.8 - 13.2	12	12	105	1.5	84	5	18	80	220 µF
SPH1F12S15	12	10.8 - 13.2	15	12	104	1	67	5	18	80	220 µF
SPH1F12D5	12	10.8 - 13.2	±5	12	113	±2	±100	8	18	74	100 µF
SPH1F12D9	12	10.8 - 13.2	±9	12	106	±1	±56	5	18	79	100 µF
SPH1F12D12	12	10.8 - 13.2	±12	12	104	±0.8	±42	5	18	81	100 µF
SPH1F12D15	12	10.8 - 13.2	±15	12	105	±0.7	±34	5	18	81	100 µF
SPH1F15S5	15	13.5 - 16.5	5	11	93	4	200	8	18	72	220 µF
SPH1F15S12	15	13.5 - 16.5	12	11	85	1.5	84	5	18	79	220 µF
SPH1F15S15	15	13.5 - 16.5	15	11	85	1	67	5	18	79	220 µF
SPH1F15D5	15	13.5 - 16.5	±5	11	93	±2	±100	8	18	72	100 µF
SPH1F15D12	15	13.5 - 16.5	±12	11	85	±0.8	±42	5	18	80	100 µF
SPH1F15D15	15	13.5 - 16.5	±15	11	85	±0.7	±34	5	18	80	100 µF
SPH1F24S3R3	24	21.6 - 26.4	3.3	7	49	5	260	8	30	73	220 µF
SPH1F24S5	24	21.6 - 26.4	5	7	59	4	200	8	30	71	220 µF
SPH1F24S9	24	21.6 - 26.4	9	7	54	2	110	5	30	76	220 µF
SPH1F24S12	24	21.6 - 26.4	12	7	54	1.5	84	5	30	78	220 µF
SPH1F24S15	24	21.6 - 26.4	15	7	53	1	67	5	30	79	220 µF
SPH1F24D5	24	21.6 - 26.4	±5	7	58	±2	±100	8	30	72	100 µF
SPH1F24D9	24	21.6 - 26.4	±9	7	55	±1	±56	5	30	76	100 µF
SPH1F24D12	24	21.6 - 26.4	±12	7	53	±0.8	±42	5	30	79	100 µF
SPH1F24D15	24	21.6 - 26.4	±15	7	53	±0.7	±34	5	30	80	100 µF



