



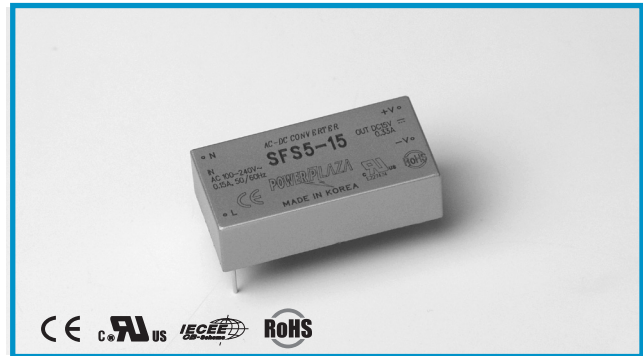
SFS SERIES

Series Name	Input Voltage	Output1	Output2	Model	Page
SFS 5 	AC85~264V or DC110~340V	3.3V / 1.25A 5.0V / 1.00A 12.0V / 0.42A 15.0V / 0.33A 24.0V / 0.21A		SFS 5	51
		+12.0V / 0.21A +15.0V / 0.17A	-12.0 / 0.21A -15.0 / 0.17A	SFD 5	
SFS 10 	AC85~264V or DC110~340V	3.3V / 2.50A 5.0V / 2.00A 12.0V / 0.83A 15.0V / 0.66A 24.0V / 0.42A		SFS 10	

SFS 5, 10

SFS5, 10 Series AC/DC Converters

Total power 5, 10 Watts
Input voltages AC85~264V or DC110~340V
#of outputs Single, Dual output



SPECIAL FEATURES

- Encapsulated, compact case
- High efficiency
- Universal input
- Surface mounting technology
- 100KHz fixed frequency
- Fixed output voltage
- Thermal shutdown
- Output short circuit protection
- Low output ripple & noise
- Isolated output (3KVAC)
- Over voltage protection (O.V.P.)
- Over current protection (O.C.P.)
- Low no-load power consumption
- 5Years warranty

ENVIRONMENTAL

- Operating temperature range -10℃~60℃
- Storage temperature range -20℃~70℃
- Humidity 20%~90%RH
- Vibration 10~55Hz at 10G 3minutes period
- Impact 50G for 11ms, once on each X, Y and Z-axis
- Cooling method convection
- Case Material PBT
- MTBF (MIL-HDBK-217F) 4.5×10^5 hrs
- Safety (5W single output) * Approved

UL (UL60950, CSA C22.2 NO.60950) : E227474 /
 CB (IEC 60950) / CE (EN 60950) - through TÜV

• EMC meet CISPR 22-B

* To meet the standard of EN61204-3 class-B, use the external noisefilter between L and N (Refer to manual)

ELECTRICAL SPECIFICATIONS

INPUT

- Voltage AC85~264V (or DC 110~340V) 50/60Hz (note)
- Current 0.15A max. @ 110VAC / 0.08A max. @ 220VAC
- Frequency 47~440Hz max. (50~60Hz typ.)
- Efficiency 75% typ.
- Inrush current (at cold start) 20A max. @ 110VAC. / 40A max. @ 220VAC
- Leakage current 0.5mA max. @ 110VAC / 0.75mA max. @ 220VAC

OUTPUT

- Voltage tolerance $\pm 2\%$ (single and uncomplementary dual)
 $\pm 3\%$ (complementary dual)
- Ripple and noise $\pm 1\%$ typ.
- Line regulation $\pm 1\%$ typ.
- Load regulation $\pm 1\%$ typ. @ Output1 / $\pm 2\%$ typ. @ Output 2
- Dynamic load regulation $\pm 3\%$ typ. @ Output1
- Temperature drift $\pm 1\%$ typ.
- Rising time 100ms max.
- Holding time 10ms min.

PROTECTION CIRCUIT

- Over voltage protection Clamp, 130~150%
- Over current protection Work at over 105% of rating & recovers automatically
- Over temperature protection 150℃ Latching, Recovery

ELECTRICALLY ISOLATED

- Input - Output AC 3KV, 1minute, 10mA / DC 500V, 100MOhms min.

NOTE 1. For cases where conformance to various safety specs (UL, CSA, CE, CB etc) are required input voltage and frequency range will be 100-240 VAC, 50-60Hz.

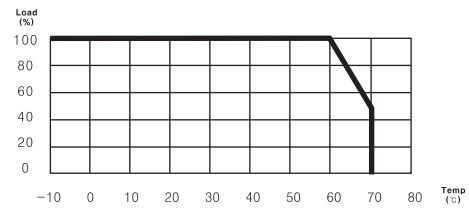
Ordering Information

Input	Output1	Output2	Maximum Power	Ripple & Noise max	Efficiency Typ.	Model Number	
AC 85 ~ 264V or DC 110 ~ 340V	3.3V@1.25A 5V@1.0A 12V@0.42A 15V@0.33A 24V@0.21A		4.125W	80mVp-p	71%	SFS5-3R3	
			5.0W	80mVp-p	75%	SFS5-5	
			5.0W	120mVp-p	77%	SFS5-12	
			5.0W	150mVp-p	77%	SFS5-15	
			5.0W	200mVp-p	77%	SFS5-24	
		+12V@0.21A +15V@0.17A	-12V@0.21A -15V@0.17A	5.0W	120/120mVp-p	75%	SFD5-1212
				5.0W	150/150mVp-p	75%	SFD5-1515
		3.3V@2.5A 5V@2.0A 12V@0.83A 15V@0.66A 24V@0.42A		8.25W	80mVp-p	75%	SFS10-3R3
				10.0W	80mVp-p	77%	SFS10-5
				10.0W	120mVp-p	80%	SFS10-12
				10.0W	150mVp-p	80%	SFS10-15
				10.0W	200mVp-p	80%	SFS10-24

Pin assignments

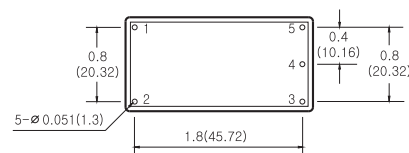
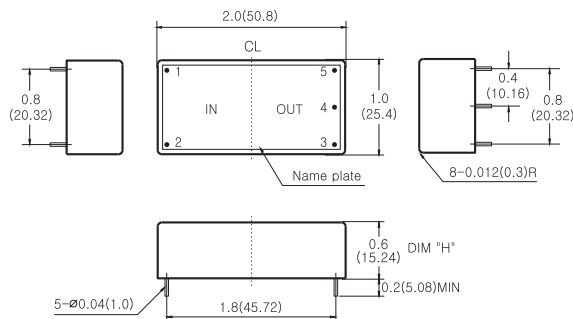
Single Output	Dual Output
1. AC(N)	1. AC(N)
2. AC(L)	2. AC(L)
3. No pin	3. -V
4. -V	4. GND
5. +V	5. +V

Derating Curve



Dimensions

► Single, Dual Output



※ Mounting hole top view

NOTES

- All dimensions are inch(mm).
- Weight : 40g or less (single, dual)-5W
80g or less (single) - 10W
- Case Material : PBT, 94V-0 Rated
- Construction : Encapsulated, Soft Pot
- Dimension "H"
0.6(15.24) for 5Watt / SFS5 version
0.9(22.86) for 10Watt / SFS10 version