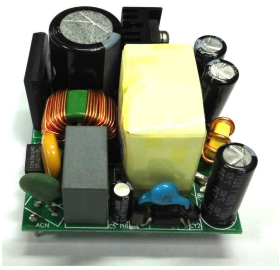
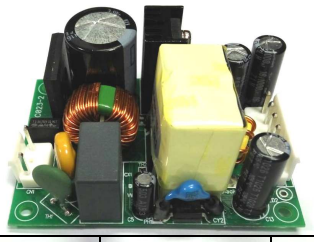
CFM61S SERIES
60 WATT SINGLE OUTPUT
AC-DC OPEN FRAME





Features

* Universal Input 90~264VAC
* High Efficiency up to 90%
* Meets EN55032 Class B and CIRSS/FCC Class B
* Approved IEC62368-1, UL62368-1, EN62368-1
* Continuous Short Circuit Protection
* Over Voltage Protection
* Peak Load (2 times of rated current (**note6**))
* Class II

Ordering information

CFM61SXXX -	**X**	**YZ** (Optional)
	Blank: PCB mount	Blank
	E: Encapsulated	PL: PEAK LOAD FUNCTION
	T: WAFER	

MODEL	Output Voltage	Output Current	Ripple (mV p-p) NOTE 1	Voltage Accuracy NOTE 2	Line Regulation NOTE 3	Load Regulation NOTE 4	% EFF. (typ.) NOTE 5
CFM61S050	5 V	8 A	50mV	±2%	±1%	±1%	86%
CFM61S120	12 V	5 A	120mV	±1%	±1%	±1%	88%
CFM61S150	15 V	4 A	150mV	±1%	±1%	±1%	88%
CFM61S240	24 V	2.5 A	240mV	±1%	±1%	±1%	89%
CFM61S360	36 V	1.67 A	360mV	±1%	±1%	±1%	89%
CFM61S480	48 V	1.25 A	480mV	±1%	±1%	±1%	90%

Typical at 25˚C, nominal line and 75% load, unless otherwise Specified

Specifications

INPUT SPECIFICATIONS:

Voltage ..... 90~264Vac
Frequency ..... 47 to 63Hz
Inrush Current ..... 120A max. @240Vac, Cold Start @25℃
Leakage Current ..... 0.25mA max. @ 264Vac
Input Current ..... 100Vac/1.5A max., 240Vac/0.8A max.

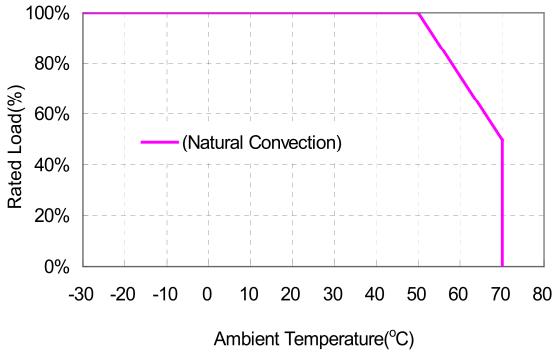
OUTPUT SPECIFICATIONS:

Holdup Time ..... 10ms typ. @115Vac
Short Circuit Protection ..... Hiccup Mode (Auto Recovery)
Temperature Coefficient ..... ±0.05%/℃
Over Voltage Protection ..... TVS Component to Clamp
Startup time ..... <3.0s
Switching Frequency ..... 65KHz Typical

GENERAL SPECIFICATIONS:

Isolation Voltage(Input to Output) 3000VAC
Operating Temperature..... -30℃~70℃ (Derating from 50℃ to 70℃)
Storage Temperature ..... -30℃~85℃
Cooling ..... Natural Convection
Humidity ..... 93%RH max. Non condensing
Isolation Voltage (Input to Output) 3000VAC
MTBF ..... MIL-HDBK-217F, GB, 25℃/115VAC ..... 300Khrs min.
Life time..... ..... 26000 hours min.@ 75% load, 40℃
Altitude 5000m
Dimensions ..... 2.000x2.000x1.346 inches (50.80x50.80x34.20 mm)
-E: 2.136x2.136x1.409 inches (54.25x54.25x35.80 mm)
-T: 2.700x2.000x1.291 inches (68.58x50.80x32.80 mm)
Weight ..... 93g, 96g(-T), 190g(-E)

CFM61S Series De-rating Curve



SAFETY AND EMISSION:

Emission and Immunity ..... EN55032 Class B, FCC Part 15 Class B
EN61000-3-2, EN61000-3-3, EN61000-6-3, EN61000-6-4
Immunity EN55024,EN61204-3, EN61000-6-1, EN61000-6-2
Safety IEC62368-1, UL62368-1

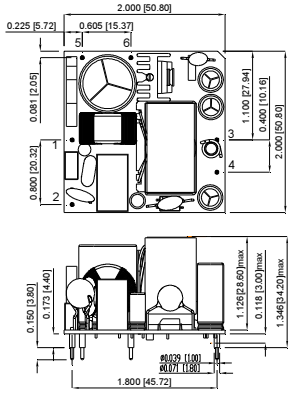
NOTE:

1. Voltage accuracy is set of 100% rated load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple&noise measuring @20MHz BW. (CFM61S050: Add a 0.1uF ceramic capacitor and 47uF E.L. capacitor.)
3. Line regulation is measured from high line to low line with full load.
4. Load regulation is measured from 10% to 100% full load.
5. T Version wafer with JST B3B-XH / B4B-XH and mate with JST housing XH series or equivalent.
6. PL(Peak load function) Lasting time < 10 seconds with a maximum 10%. duty cycle And must add external 100uF / 400V capacitor to BC+ & BC-

Mechanical Specification

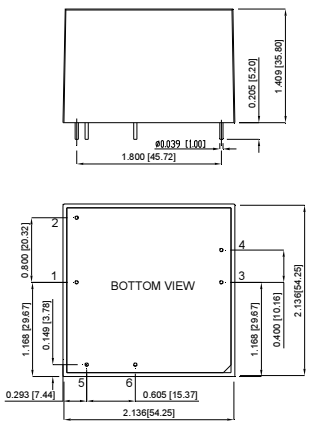
All Dimensions In Inches[mm]
Tolerance Inches:x.xxx= ± 0.02
Millimeters: x.xx = ± 0.5

CFM61SXXX

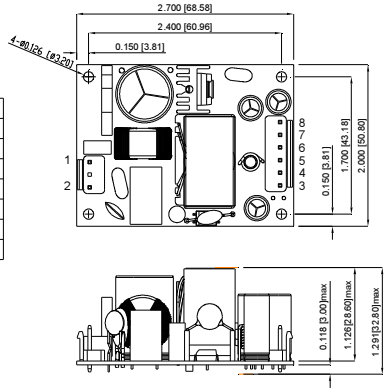


PIN CONNECTION	
Pin	Function
1	ACL
2	ACN
3	+Vout
4	-Vout
5	BC+
6	BC-

CFM61SXXX-E



CFM61SXXX-T



PIN CONNECTION	
Pin	Function
1	ACL
2	ACN
3	-Vout
4	-Vout
5	-Vout
6	+Vout
7	+Vout
8	+Vout

Typical at 25˚C, nominal line and 75% load, unless otherwise Specified