

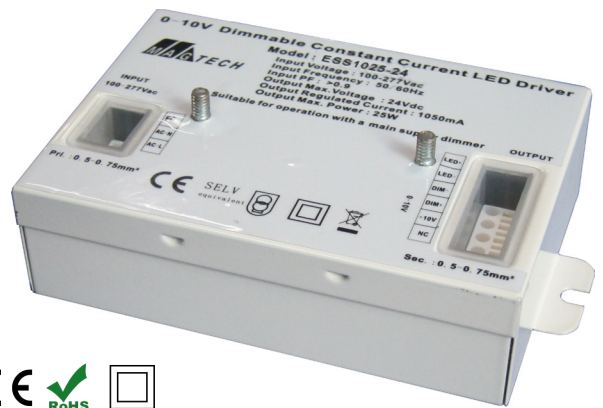
Project Name:
Type:

ESS1048 Series

High Power Constant Current LED Driver | 48 Watts Max.

PRODUCT FEATURE

- Universal Input range from 110VAC~304VAC, 50/60Hz
- Stud-mount and Tab-mount design maximize design flexibility
- Size: 4.25" (L) x 3.00" (W) x 1.18" (H)
- Suitable for dry and damp location applications
- Standard 1-10V dimming; compatible with fluorescent dimmers
- UL8750 and CE compliant
- Wide selection of pre-adjusted C/C outputs



SPECIFICATIONS

INPUT RANGE:	100 ~ 264VAC; 277VAC
POWER FACTOR:	> 0.92 at full load, 115VAC or 230VAC
INPUT CURRENT:	0.6 Amps max at 115VAC
OUTPUT CURRENT REGULATION:	±5%
PROTECTION:	OCP, SCP, OLP - Auto Recovery
DIMMING METHOD:	0-10V dimmer/ Fluorescent dimmer
HOLD UP TIME:	Half cycle min. at 120VAC and 80% rated load
FREQUENCY:	47 to 63Hz
INRUSH CURRENT:	50.0 Amps max. at 230VAC, cold start 25°C
EFFICIENCY:	83% Typical full load
MAXIMUM POWER:	48W
LEAKAGE CURRENT:	300uA typ.
DIMENSION:	108mm x 76mm x 30mm (LxWxH)
REGULATION COMPLIANCE:	UL8750 or EN61347, EN55015, EN61547

WARRANTY

- See [Limited Warranty Policy](#) for more additional information

ENVIRONMENTAL

OPERATING TEMPERATURE:	-20 to +50°C, Tc: 80°C
STORAGE TEMPERATURE:	-40 to +85°C
HUMIDITY (Non-Condensing):	5% to 95%
COOLING:	Convection
VIBRATION FREQUENCY:	5 to 50Hz
MTBF:	>100,000 hours at full load and 25°C ambient conditions (MIL-217F)

MODEL SELECTION

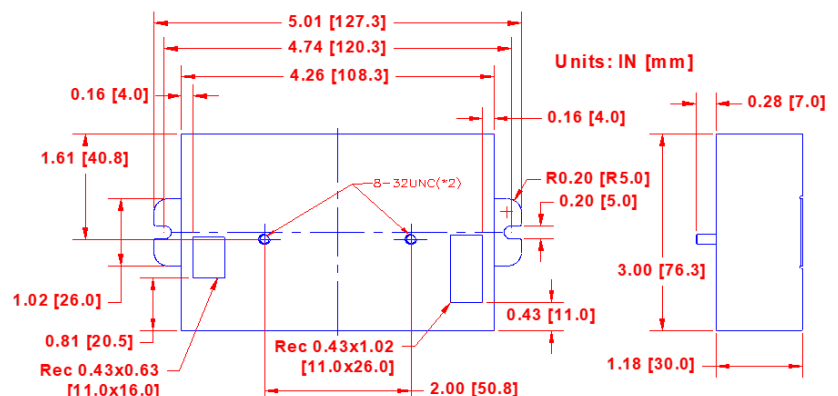
MODEL	CONSTANT CURRENT MODE		
	V (DC)	A (Ma)	Max. W
ESS1048-24	24, ±5%	2000	48
ESS1048-36	36, ±5%	1330	48
ESL1048-48	48, ±5%	960	48

Note: Constant Voltage models are not dimmable

MODEL	CONSTANT CURRENT MODE		
	A (mA)	V (DC)	Max. W
ESS1048-24-C2500	2500 - 2000	14 - 25	48
ESS1048-36-C1660	1660 - 1330	24 - 36	48
ESS1048-48-C1200	1200 - 960	30 - 50	48
ESS1048-72-C0830	830 - 660	40 - 72	48

MECHANICAL SPECIFICATION - ESS1025-XX-YY

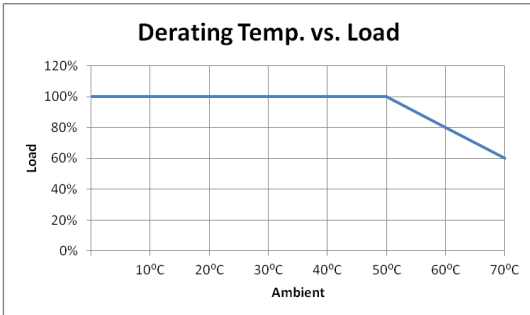
- XXX** : Maximum Forward Voltage (Vf)
YY : Constant Current Output (If)
AC : Input terminal block
DC : Outout terminal block
0-10V : Dimming control terminal block



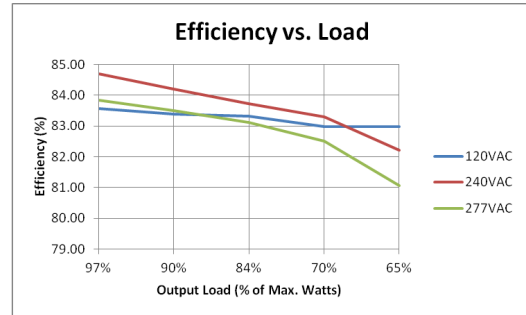
ESS1048 Series

High Power Constant Current
LED Driver | 48 Watts Max.

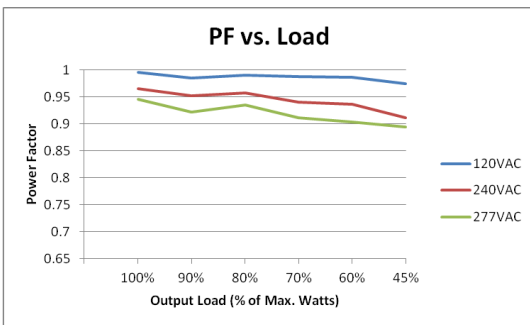
DE-RATING TEMP. VS LOAD



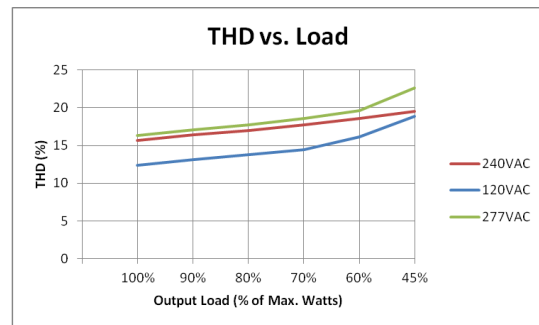
EFFICIENCY VS LOAD



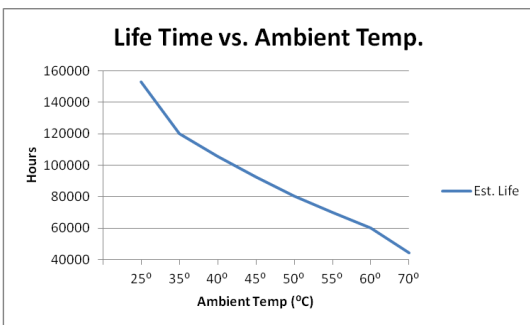
POWER FACTOR VS LOAD



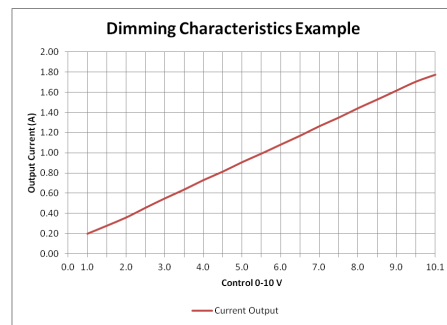
THD VS LOAD



LIFE TIME VS AMBIENT TEMP.



DIMMING CHARACTERISTICS



DIMMING WIRING DIAGRAM

For general operation and networking purposes where an OFF mode condition is required, our LED Driver dimming models (ESS & ESL) operate with 1-10V control input, where 1V input is minimum dim and less than 1V is OFF.

