# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## **Thomas Research Products**

SSL Solutions Faster Than The Speed Of Light®

## 150W TTC-150 Series

Switch Mode LED Drivers Constant Current and Dimming Aluminum Housing

### **Electrical Specifications**

Input Voltage Range:	347 - 480 Nom. Vac (312 - 528 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90 @ full load, 347V through 480V
Input Current:	0.7 A @ 347Vac full load, 0.42 A @ 480Vac full load
Inrush Current:	15 A @ 480Vac
Maximum Power:	150W
Line Regulation:	± 1%
Load Regulation:	± 3%
THD:	≤ 20% @ 75-100% load
Leakage Current:	1 mA max @ 480Vac
Typical Efficiency	91-94% @ full load
Turn-on Delay:	1S
Protection:	Over-Voltage, Over-Temperature (105°C), and Short Circuit Protection with Auto Recovery

### **Environmental Specifications**

Operating Temperature:	-40°C to +70°C Ambient
Storage Temperature:	-40°C to +85°C
Humidity:	10% to 100%
Cooling:	Convection
MTBF:	250,000 Hours @ 480Vac, 80% load, 25°C, per MIL- HDBK-217F
Lifetime:	87,600 Hours @ 480Vac, 80% load and Tc = 60°C
Weight:	2.87 lbs. (1.3 kg)





Constant Current Versions - Product Specifications					
Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max Output Power (W)	Typical Efficiency	
TTC-150S058ST	580	129-258	150	91%	
TTC-150S070ST	700	107-214	150	91%	
TTC-150S105ST	1050	71-142	150	90%	
TTC-150S140ST	1400	53-107	150	90%	
TTC-150S210ST	2100	35-71	150	90%	
TTC-150S280ST	2800	27-54	150	90%	
TTC-150S350ST	3500	21-43	150	89%	
TTC-150S420ST	4200	18-36	150	89%	

Dimming Versions - Product Specifications					
Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max Output Power (W)	Typical Efficiency	
TTC-150S058DT	580	129-258	150	91%	
TTC-150S070DT	700	107-214	150	91%	
TTC-150S105DT	1050	71-142	150	90%	
TTC-150S140DT	1400	53-107	150	90%	
TTC-150S210DT	2100	35-71	150	90%	
TTC-150S280DT	2800	27-54	150	90%	
TTC-150S350DT	3500	21-43	150	89%	
TTC-150S420DT	4200	18-36	150	89%	



Specifications subject to change without notice.

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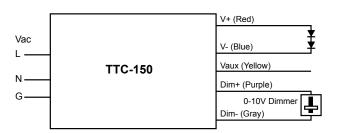
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#### TTC-150W

### **Dimming Control**

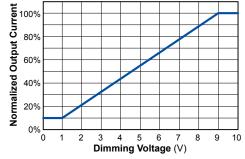
#### On secondary side

Parameters	Minimum	Typical	Maximum
12V output voltage	10.8V	12V	13.2V
12V output source current	0 mA	_	20mA
Absolute maximum voltage on the 1-10v input pin	0V		15V
Source current on 1-10V input pin	0μΑ	_	200µA



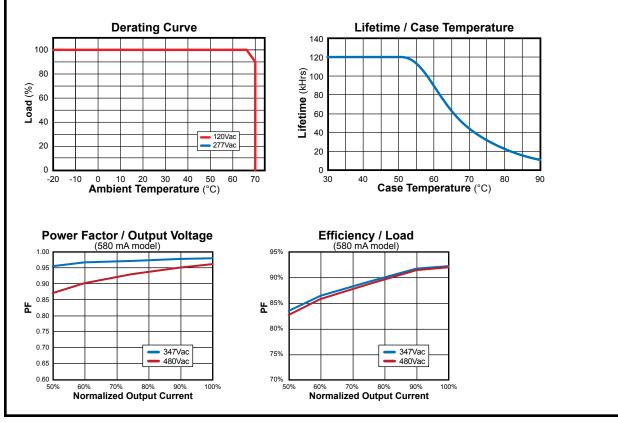


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#### Notes:

- 1. Io is actual output current and Ir is rated current without dimming control.
- 2. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (approx. 50% of the max. output voltage for any given model).
- 3. If the output voltage is maintained above 50% of the maximum output voltage, the dimming control may be operated over the entire 1-10V range with output current varying from 10% to 100% of Ir.
- 4. The dimming signal may be less than 1V; however, no further dimming will occur between 0V and 1V.
- 5. Do not connect the GRAY of dimming to the output; otherwise, the LED driver can not work normally.



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#### TTC-150W

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#### **Dimensions - mm** TTC-150 Dimming AC IN (UL STW 18#/3C) 222 DC OUT (UL SJTW 18#/2C) 188 220±20 28 184 Black (ACL) White (ACN) Green (GND) Red (V+) Blue (V-) í ( 15±2 ₽ 50±5 ₽ 15±2 5±1 Black/White 30±2 650+20 Purple Gray 40±5 50±5 230±20 DIMMING WIRE (UL 2464 3\*22AWG) ₿ Ø25 ₿ 7.5 202 **TTC-150** 222 43.5 AC IN (3\*AWG #18) DC OUT (2\*AWG #18) 188 38 220±20 184 Black (ACL) White (ACN) Green (GND) € 15±2 ₽ 50±5 8 Red (V+ Blue (V-2 50±2 ₽ 党 15±2 650±20 4.4 ₿ Ø2,5 ņ ₿ 202 Safety Category Standard Note: UL8750, Compliance to UL1012, CAN/CSA-C22.2 No. 223-M91, CSA-C22.2 No. 107.1-01 Disconnect power to LED driver for at least 30 seconds before con-UL/CUL necting or disconnecting Driver output and LED Engine. This prevents potential arcing transients that can damage the Engine and Driver. EMI Standards Notes See Hot Plugging in our Driver Application Guide for more information. FCC Part 15 ANSI C63.4:2009 Class B

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