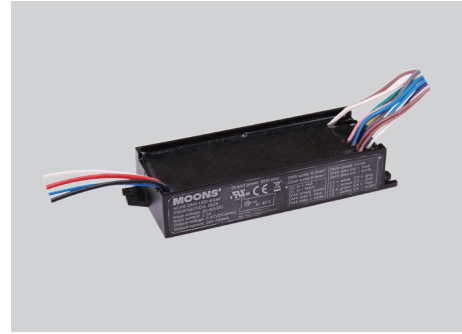


PR085N070DQ_DMX

Features

- MODEL: PR085N070DQ_DMX
- DMX/RDM constant current LED driver
- 4 LED channel, output current can be changed from 200mA to 700mA
- Constant power maximum is 85W(4V<Vin-Vo<20V), power per channel maximum is 36W
- Normal life time is 80000 hours (ambient temperature 50°C)
- Dimming range 0.1%~100%
- 8-year warranty



113*40*22mm

Electrical Specifications

Maximum input voltage range	20 - 60 Vdc
Output voltage range	8 - 52 Vdc
Output Current	200-700 mA
Maxium output power	85W (4V<Vin-Vo<20V)
Efficiency typical value (60Vdc/85W,full loaded ^①)	94 - 96 %
Start-up time	<0.5S
The maximum setup current precision	± 5%
Ripple current (full loaded)	200mA
Dimming range	0.1% -100%
Ambient Temperature	-35...50°C
Case Temperature	75°C
Weight	180g
Reference dimension	113*40*22mm

① Load:52V*410mA,4ch total 85W

Model Specifications

Type	Output Current (every channel)	Output Voltage (every channel)	Output Power (total)	Input Voltage (max)	Efficiency	Case Temperature	Ambient Temperature
PR085N070DQ_DMX	200mA	52V	41.60W	60V	93.04%	75°C	-35 - 50°C
	250mA	52V	52.00W	60V	94.06%	75°C	-35 - 50°C
	300mA	52V	62.40W	60V	95.12%	75°C	-35 - 50°C
	350mA	52V	72.80W	60V	95.48%	75°C	-35 - 50°C
	400mA	52V	83.20W	60V	95.23%	75°C	-35 - 50°C
	450mA	47V	84.60W	60V	94.98%	75°C	-35 - 50°C
	500mA	42V	84.00W	60V	94.73%	75°C	-35 - 50°C
	550mA	38V	83.60W	58V	94.48%	75°C	-35 - 50°C
	600mA	35V	84.00W	55V	94.03%	75°C	-35 - 50°C
	650mA	32V	83.20W	52V	93.68%	75°C	-35 - 50°C
700mA	30V	84.00W	50V	93.13%	75°C	-35 - 50°C	

Function Description

- DMX/RDM

DMX+、DMX-、Shield are the interfaces of DMX/RDM.

- Set the Current

With the help of our Smartkey and DMX Configurator, you can set the current of the driver, each step is 1 mA. Please refer to specification of Smartkey.

- Temperature Detection

In order to protect the LED, the temperature of LED is detected by a NTC ①. When the temperature exceeds the point which can be set by Smartkey, the output current can be decreased automatically, but not less than 25%.

- Constant Output Power

The driver can satisfy the curve of constant output power within a large range of output current and voltage.

- Protection

- Thermal Protection

When the temperature of the inside PCB exceeds 110 °C, output current will be decreased to 50%. And it cannot recover until the temperature drops to 70°C.

- Short-circuit Protection

Once the output short-circuits, the output will be cut off automatically. Then the driver will try to restart every 10s.

- No-load Protection

The driver operating with no load will not be damaged, and it will try to restart every 10s. So the driver supports hot plugin.

- Reverse Polarity Protection

The driver will not be damaged if the input polarity reverses.

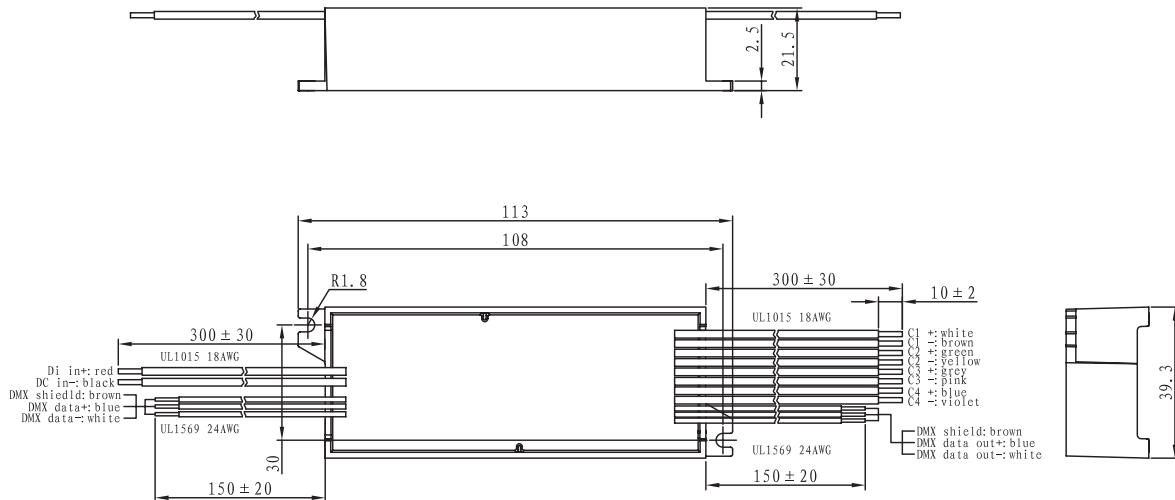
- Online Update

Connect Smartkey to PC through a USB port, then connect Smartkey to the driver correctly to update. Please refer to the specification of Smartkey.

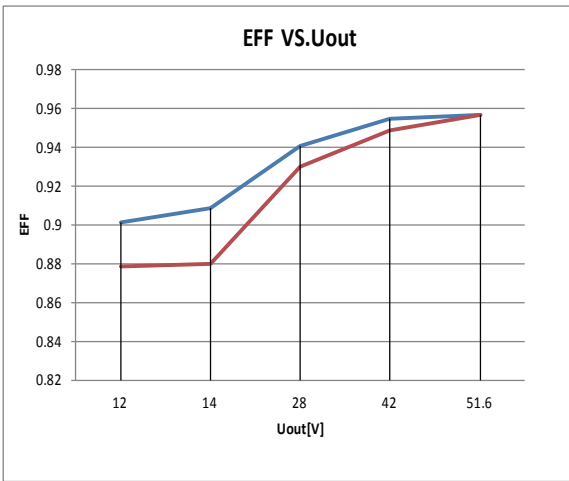
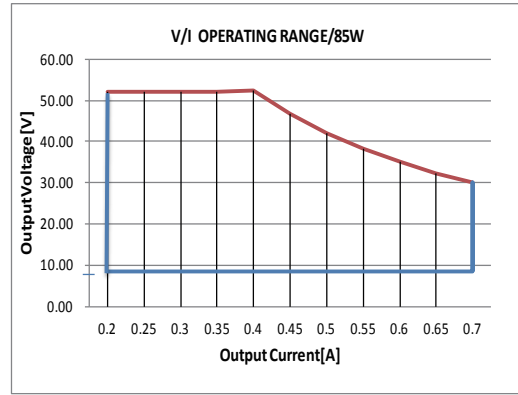
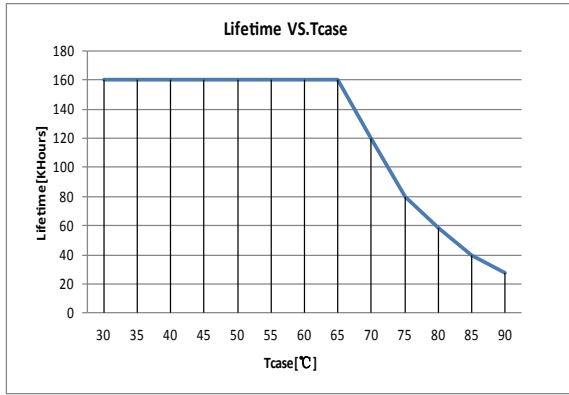
*1: Recommended manufacture and type of the NTC

Manufacture: Thinking TSM2A473J409ARZA(SMD) \ VISHAY NTCS0805e4473JXT \ MURATA NCP21WB473J03RA

Mechanical Outline (unit: mm)



Test curve



every channel: 350mA
blue line: Vin-Vout=6V
red line: Vin-Vout=20V