

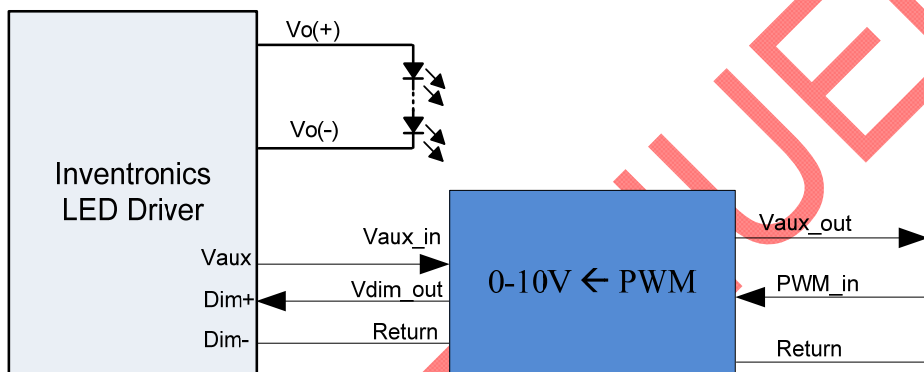
Features

- PWM to 0-10V
- Positive logic
- Duty cycle Control
- Waterproof (IP66) and Damp Location



Description

This product convert PWM signal to 0-10V signal. The output is relative to PWM duty cycle, non-relative to the amplitude of PWM signal.



Model Selection

Connection to LED driver	Connection to Controller	P/N ⁽¹⁾	Note
UL Wire(black/white, purple, gray) with flying leads	UL Wire(yellow, pink, gray) with flying leads	SDD-APFN1	
UL Wire with UL female connector	UL Wire(yellow, pink, gray) with flying leads	SDD-APFN2	
UL Wire with UL female connector	UL Wire with UL male connector	SDD-APFN3	
VDE Wire(black/white, purple, gray) with flying leads	VDE Wire(yellow, pink, gray) with flying leads	SDD-APFN4	
VDE Wire with UL female connector	VDE Wire(yellow, pink, gray) with flying leads	SDD-APFN5	
VDE Wire with UL female connector	VDE Wire with UL male connector	SDD-APFN6	

Note: (1) A suffix -xxxx may be added to denote variations or modifications to the base product, where x can be any alphanumeric character or blank.

Interface Specifications

Parameter	Min.	Typ.	Max.	Note
Vaux_in Voltage	11.4V	12V	24V	
Vaux_in Current	10mA	-	-	
PWM_in High Level	3V	-	22.5V	
PWM_in Frequency Range	100Hz	-	20KHz	

Interface Specifications (Continued)

Parameter	Min.	Typ.	Max.	Note
PWM_in Duty Cycle	0%	-	100%	
DIM_out Voltage	0	-	10V	
DIM_out Source Current	0	-	10mA	
DIM_out Sink Current	0	-	10mA	
Vaux_out Voltage	(Vaux_in-1)V	-	Vaux_in	
Vaux_out Sourcing Current	0	-	0.3A	Vaux_in current > 0.31A
	0	-	(Vaux_in current - 10) mA	Vaux_in current ≤ 0.31A

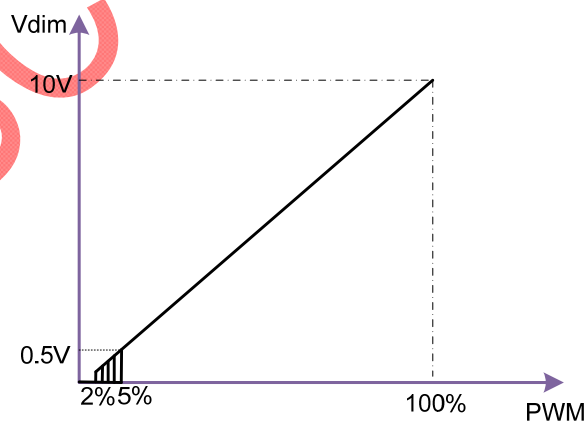
General Specifications

Parameter	Min.	Typ.	Max.	Notes
Dimensions Inches (H x D) Millimeters (H x D)		1.5 x 0.63 38 x 16		
Net Weight	-	40 g	-	

Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-40 °C	-	+70 °C	Humidity: 10% RH to 100% RH.
Storage Temperature	-40 °C	-	+70 °C	Humidity: 5% RH to 100% RH.

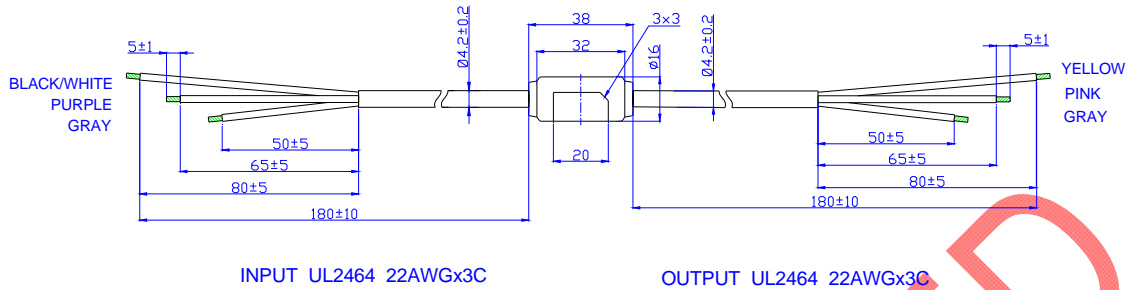
Dimming Curve



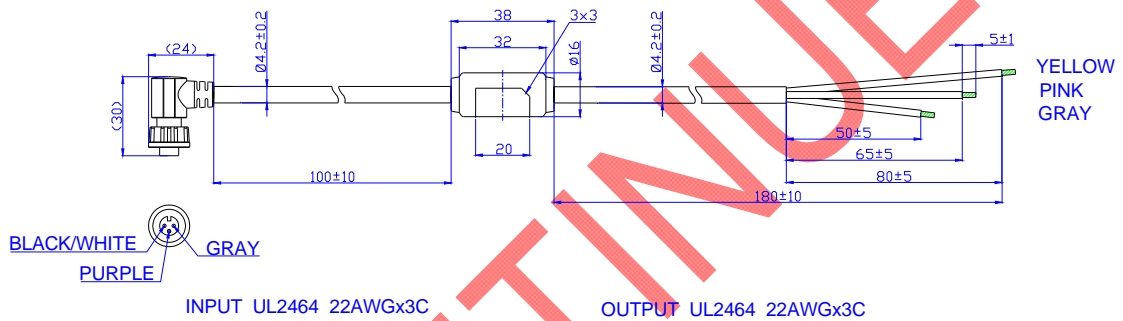
Positive logic

Mechanical Outline

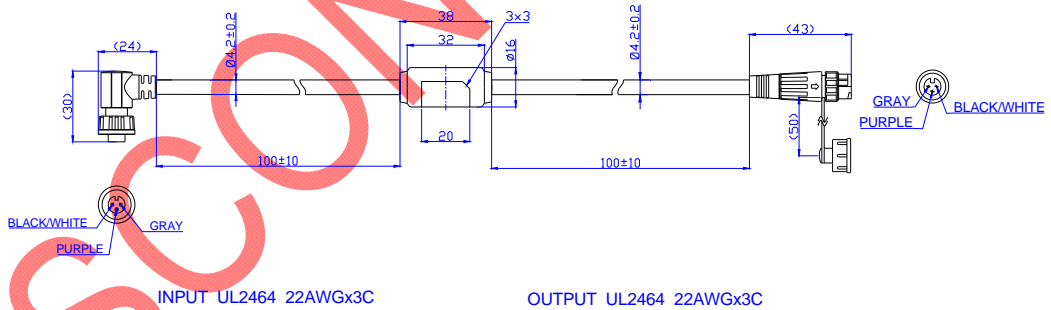
SDD-APFN1



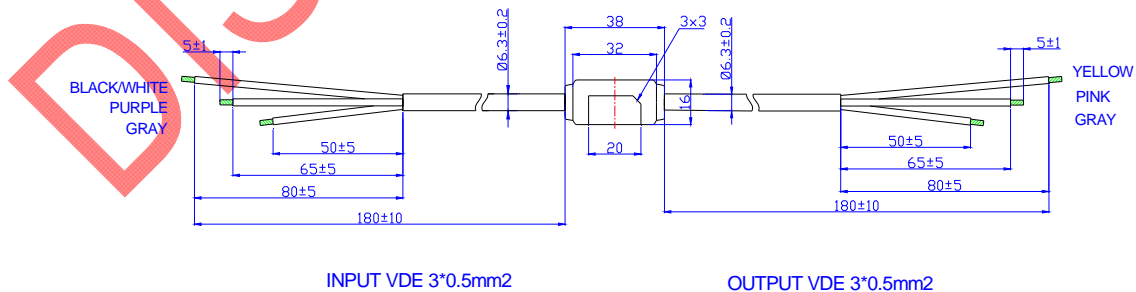
SDD-APFN2



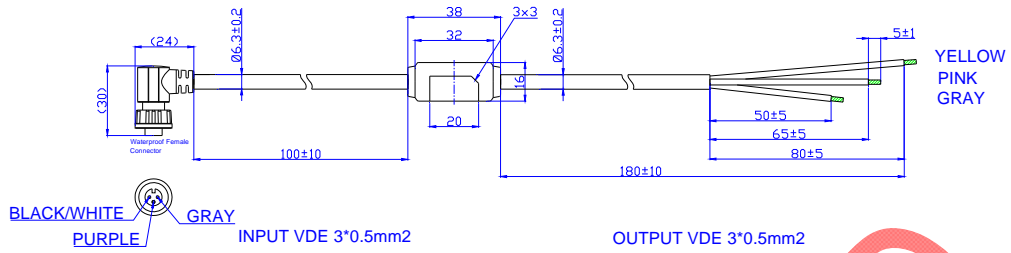
SDD-APFN3



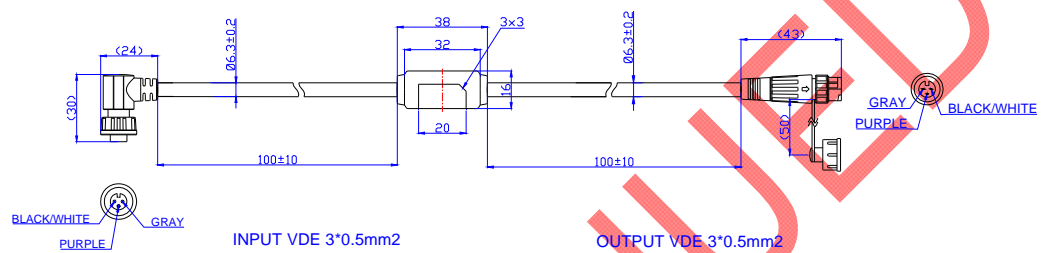
SDD-APFN4



SDD-APFN5



SDD-APFN6



Function definition of interface

Connection to LED driver			Connection to Controller		
Wire Color	Function	Connection	Wire Color	Function	Connection
BLACK/WHITE	Vaux_in	To LED driver's auxiliary power	YELLOW (BLACK/WHITE)	Vaux_out	Auxiliary Power for external circuit
PURPLE	Vdim_out	To LED driver's dimming	PINK (PURPLE)	PWM_in	PWM Dimming signal input
GRAY	Return	Return for auxiliary power and dimming signal	GRAY	Return	Return for auxiliary power and dimming signal

Application Note

This PWM Controller can only work with 0-10V Dimmable LED drivers. Below is the list.

LED Series Can Match with PWM Controller	
Indoor LED Drivers	Outdoor LED Drivers
LUC-018SxxxDSP	ESC-075SxxxDT
LUC-024SxxxDSP	ESC-150SxxxDT
LUC-024SxxxDSW	ETC-150SxxxDT
EUC-026S045DS-0001	EUC-036SxxxDT/DV
EUC-026SxxxDS	EUC-052SxxxDT/DV
EUC-042SxxxDS-0001	EUC-075SxxxDD
EUC-042SxxxDS	EUC-075SxxxDT/DV
LUC-042DxxxDDM/DSM	EUC-100SxxxDT/DV
LUC-042S070DSP	EUC-108TxxxDT
LUC-042SxxxDSW	EUC-120SxxxDT/DV
LTC-040SxxxDSP	EUC-120TxxxDT/DV
LUC-042SxxxDTG	EUC-144QxxxDT
LUC-066TxxxDDM/DSM	EUC-150SxxxDDA
LUC-072QxxxDDM/DSM	EUC-150SxxxDTA/DVA
	EUC-160QxxxDT/DV
	EUC-180PxxxDT
	EUC-200PxxxDT/DV
	EUC-240HxxxDT/DV

RoHS Compliance

Our products comply with the European Directive 2011/65/EC, calling for the elimination of lead and other hazardous substances from electronic products.

Revision History

Change Date	Rev.	Description of Change		
		Item	From	To
2013-09-23	A	Datasheets Release	/	/
2013-11-19	B	Mechanical Outline	/	Updated
		Application Note	/	Added
2014-08-11	C	Dimensions	/	Added
		Net Weight	/	Added

DISCONTINUED