0.4 inch (10.21 mm)
DUAL DIGIT NUMERIC LED DISPLAYS UVD-4X2XC SERIES

DESCRIPTION

The UVD-432XC/482XC is 0.4 inch (10.21 mm) height dual digit display.
Choices of four colors-high efficiency red/bright red/green/red orange.
High efficiency red, bright red and red orange display have red face and red segments.
Green display has gray face and green segments.
The bright red and green LED chip are made from GaP on a transparent GaP substrate.
The red orange LED chip are made from GaAsP on a transparent GaP substrate.

FEATURES

- Industuy Standard Size
- Wide Viewing angle
- Continuous uniform segments.
- Excellent characters appearance
- Low power requirement

DEVICES

PART NO.	DESCRIPTION	PACKAGE DIMENSION	INTERNAL CIRCUIT DIAGRAM
UVD-432XC	Common Cathode	Fig. 1	Fig. 2
UVD-482XC	Common Anode		

ABSOLUTE MAXIMUM RATINGS

@ T_A=25 ºC

PARAMETER	HI.EFF. RED	BRIGHT RED	GREEN	RED ORANGE	UNIT
Power Dissipation Per Segment	75	40	75	75	mW
Peak Forward Current Per Segment (1/10 Duty Cycle. ,0.1ms pulse width)	100	60	100	100	mA
Continuous Forward Current Per Segment	25	15	25	25	mA
Derating Linear From 25ºC Per Segment	0.33	0.2	0.33	0.33	mA/ºC
Reverse Voltage Per Segment	5	5	5	5	V
Operating Temperature Range	-35ºCto+85ºC				
Storage Temperature Range	-35ºCto+85ºC				
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260ºC					

0.4 inch (10.21 mm)
DUAL DIGIT NUMERIC LED DISPLAYS ***UVD-4X2XC SERIES***

PACKAGE DIMENSIONS

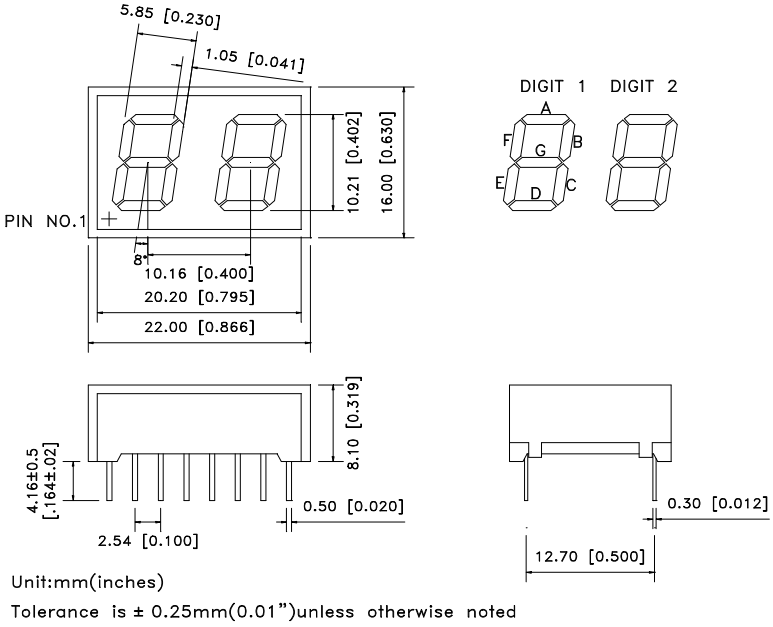


Fig. 1

INTERNAL CIRCUIT DIAGRAM

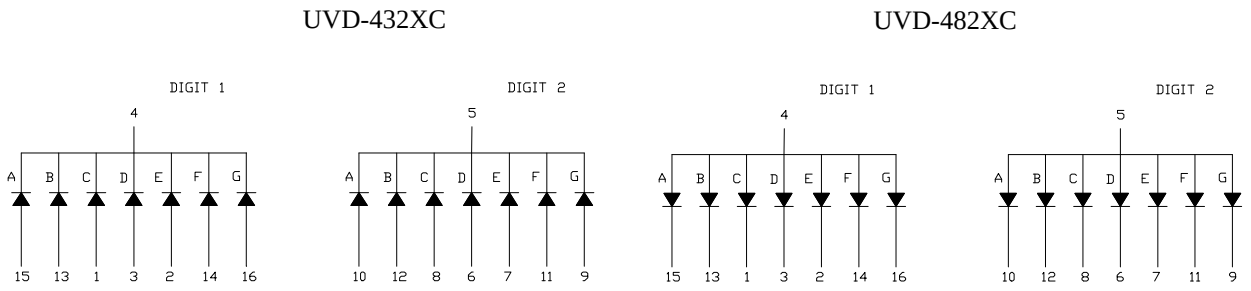


Fig. 2

0.4 inch (10.21 mm)
DUAL DIGIT NUMERIC LED DISPLAYS ***UVD-4X2XC SERIES***

PIN CONNECTION

PIN	CONNECTION	
	UVD-432XC	UVD-482XC
1	ANODE C (DIGIT 1)	CATHODE C (DIGIT 1)
2	ANODE E (DIGIT 1)	CATHODE E (DIGIT 1)
3	ANODE D (DIGIT 1)	CATHODE D (DIGIT 1)
4	COMMON CATHODE (DIGIT 1)	COMMON ANODE (DIGIT 1)
5	COMMON CATHODE (DIGIT 2)	COMMON ANODE (DIGIT 2)
6	ANODE D (DIGIT 2)	CATHODE D (DIGIT 2)
7	ANODE E (DIGIT 2)	CATHODE E (DIGIT 2)
8	ANODE C (DIGIT 2)	CATHODE C (DIGIT 2)
9	ANODE G (DIGIT 2)	CATHODE G (DIGIT 2)
10	ANODE A (DIGIT 2)	CATHODE A (DIGIT 2)
11	ANODE F 9 DIGIT 2)	CATHODE F (DIGIT 2)
12	ANODE B (DIGIT 2)	CATHODE B (DIGIT 2)
13	ANODE B (DIGIT 1)	CATHODE B (DIGIT 1)
14	ANODE F (DIGIT 1)	CATHODE F (DIGIT 1)
15	ANODE A (DIGIT 1)	CATHODE A (DIGIT 1)
16	ANODE G (DIGIT 1)	CATHODE G (DIGIT 1)

ELECTRICAL/OPTICAL CHARACTERISTICS

HI.EFF. RED (UVD-432HRC / 482HRC)

@ T_A=25 ºC

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	500	1300		µcd	I_F = 10 mA
Peak Emission Wavelength	λp/Hue		635/623		nm	I_F = 20 mA
Spectral Line Half-Width	Δλ		40		nm	I_F = 20 mA
Forward Voltage, Per Segment	V_F		2.1	2.6	V	I_F = 20 mA
Reverse Current, Per Segment	I_R			100	µA	V_R = 5 V
Luminous Intensity Matching Ratio	I_v- m			2:1		I_F = 10 mA

BRIGHT RED (UVD-432PC / 482PC)

@ T_A=25 ºC

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	200	500		µcd	I_F = 10 mA
Peak Emission Wavelength	λp/Hue		697/657		nm	I_F = 20 mA
Spectral Line Half-Width	Δλ		90		nm	I_F = 20 mA
Forward Voltage, Per Segment	V_F		2.1	2.6	V	I_F = 20 mA
Reverse Current, Per Segment	I_R			100	µA	V_R = 5 V
Luminous Intensity Matching Ratio	I_v- m			2:1		I_F = 10 mA

ELECTRICAL/OPTICAL CHARACTERISTICS

GREEN (UVD-432GC / 482GC)

@ T_A=25 ºC

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	500	1300		µcd	I_F = 10 mA
Peak Emission Wavelength	λp/Hue		565/569		nm	I_F = 20 mA
Spectral Line Half-Width	Δλ		30		nm	I_F = 20 mA
Forward Voltage, Per Segment	V_F		2.1	2.6	V	I_F = 20 mA
Reverse Current, Per Segment	I_R			100	µA	V_R = 5 V
Luminous Intensity Matching Ratio	I_v- m			2:1		I_F = 10 mA

RED ORANGE (UVD-432EC / 482EC)

@ T_A=25 ºC

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	500	1300		µcd	I_F = 10 mA
Peak Emission Wavelength	λp/Hue		630/621		nm	I_F = 20 mA
Spectral Line Half-Width	Δλ		40		nm	I_F = 20 mA
Forward Voltage, Per Segment	V_F		2.1	2.6	V	I_F = 20 mA
Reverse Current, Per Segment	I_R			100	µA	V_R = 5 V
Luminous Intensity Matching Ratio	I_v- m			2:1		I_F = 10 mA

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES

(Ambient Temperature =25ºC Unless Otherwise Noted)

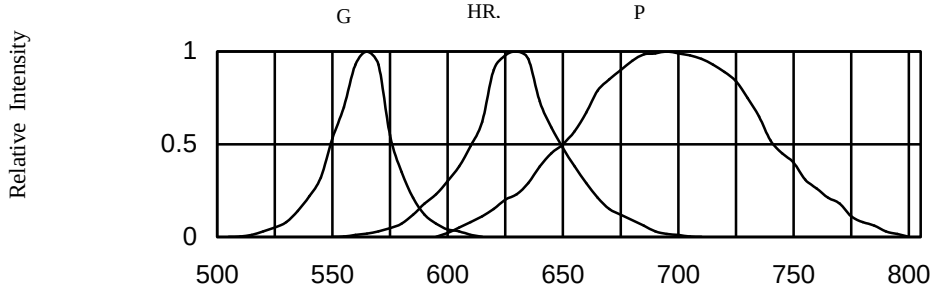
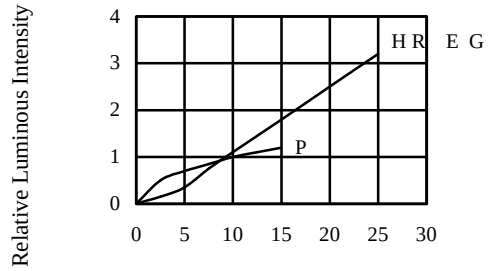
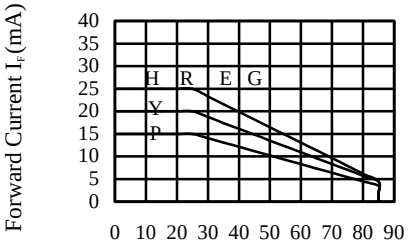


FIG.1 RELATIVE LUMINOUS INTENSITY VS.
WAVELENGTH



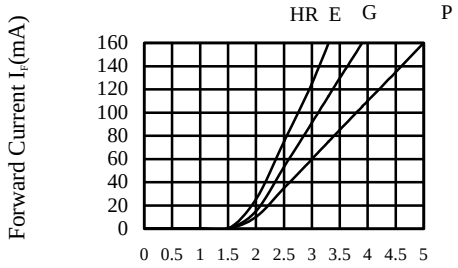
Forward Current I_F (mA)

FIG.2 RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT



Ambient Temperature (^oC)

FIG.3 ALLOWABLE DC CURRENT
VS. AMBIENT TEMPERATURE



Forward Voltage (V)

FIG.4 FORWARD CURRENT
VS. FORWARD VOLTAGE