



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!



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NOTE:

1. THE C OPTION SPECIFIES A PIN LENGTH = .20" FOR PANEL LIGHTS MOUNTED IN THE PS40 OR PS44 SOCKET. MOUNTING HARDWARE IS INCLUDED WITH THE SOCKET. DO NOT SELECT THE W OPTION.
2. MODEL 405 HAS NO LENS. OMIT THE LENS DIFFUSION AND COLOR (e.g 405-BG5H-O).
3. I<sub>v</sub> = TYPICAL LUMINOUS INTENSITY @ I<sub>f</sub> = 20mA (T<sub>a</sub> = 25 °C). I<sub>v</sub> IS MEASURED WITHOUT LENS LOW POWER LEDs @ I<sub>f</sub> = 2mA.
4. USE WITH MODEL 405 ONLY.
5. SEE VOLTAGE / CURRENT TABLE FOR DESIGN SPECIFICATIONS. DESIGN CURRENT FOR LOW POWER LEDs = 2mA.
6. T<sub>a</sub> = 25°C. VOLTAGE "2" INDICATES EXTERNAL RESISTOR REQUIRED. VOLTAGES 5H THROUGH 60H ARE VDC. FOR AC OPERATION, INSERT D AFTER VOLTAGE (e.g. 24HD). D INDICATES BUILT-IN RECTIFIER, NOT REQUIRED FOR 5H OR 120VAC. DC OPERATION NOT AVAILABLE FOR 120V. BI-COLOR AND TRI-COLOR NOT AVAILABLE IN AC VOLTAGES.
7. OMIT H WHEN SELECTING A VOLTAGE (e.g 461-RLP-CWO).
8. SELECT -CW OR -NW LENS ONLY. -RAG WIRE LEADS: GREEN ANODE/BLACK CATHODE/RED ANODE. -GAR WIRE LEADS: GREEN CATHODE/BLACK ANODE/RED CATHODE. COMMON LEAD IS THE FIRST LEAD CLOCKWISE FROM REFERENCE MARK ON HEADER. TRI-COLOR 5 OR 12 VOLT, OMIT H IN PART NUMBER.
9. SELECT HIGH INTENSITY LEDS ONLY.
10. OMIT LENS DIFFUSION WHEN SELECTING SMOKED LENS (e.g. 461-NWR-SO).
11. USE APPROPRIATE ESD PRECAUTIONS DURING HANDLING AND OPERATION.
12. MOUNTING HARDWARE PROVIDED
13. THIS DEVICES ARE RoHS COMPLIANT.

REVISIONS					
ECN	REV.	DESCRIPTION	DATE	BY	APPROVED
1122	A	INITIAL RELEASE	1/5/18	AS	OL

VOLTAGE/CURRENT	
DESIGN Vf/If	MAX Vf/If
<b>V/C Table I</b>	
5V/22mA	5.5v/28mA
12V/20mA	14V/25mA
15V/24mA	16.5V/28mA
24V/17mA	26V/20mA
28V/16.5mA	30V/18mA
48V/15mA	50V/16mA
60V/9mA	65V/10mA
120VAC/3.5mA	130VAC/4mA

VOLTAGE / CURRENT	
DESIGN Vf/If	MAX Vf/If
<b>V/C Table II</b>	
5V/15mA	5.5v/23mA
12V/15mA	14V/20mA
15V/15mA	16.5V/18mA
24V/15mA	26V/18mA
28V/15mA	30V/17mA
48V/9.5mA	50V/10mA
60V/7mA	65V/8mA
120VAC/3.5mA	130VAC/4mA

**CONFIGURATION FOR MODELS**

MODEL	WIRES
△ C (OPTIONAL)	△ W (OPTIONAL)

**461 W**

STANDARD INTENSITY - DIFFUSED ENCAPSULATION		
LED	COLOR	V/C (TABLE)
-BR	RED	I
-BA	AMB	I
-BG	GRN	I
MEDIUM INTENSITY - TINTED ENCAPSULATION		
LED	COLOR	V/C (TABLE)
-BCR	RED	I
-BCA	AMB	I
-BCG	GRN	I
HIGH INTENSITY - WATERCLEAR ENCAPSULATION		
LED	COLOR	V/C (TABLE)
-NWR	RED	I
-NWO	ORG	I
-NWA	AMB	I
-NWG	GRN	II
-NWB	BLU	II
-NWW	CWHT	II
-NWL	WWHT	II
-NKR	RED	I
-NKO	ORG	I
-NKA	AMB	I
-NKG	GRN	II
-NKB	BLU	II
-NKW	CWHT	II
-NKL	WWHT	II

WIRE LENGTH (OPTIONAL)*	
NUMBER	LENGTH (in)
8	8"
12	12"
16	16"
18	18"
24	24"
36	36"
40	40"
60	60"

VOLTAGE
2
5H
12H
15H
24H
28H
48H
60H
120 △ 9

LENS DIFFUSION
-C (CLEAR)
-N (DIFFUSED)

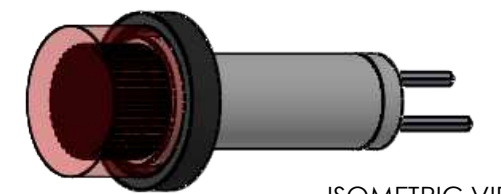
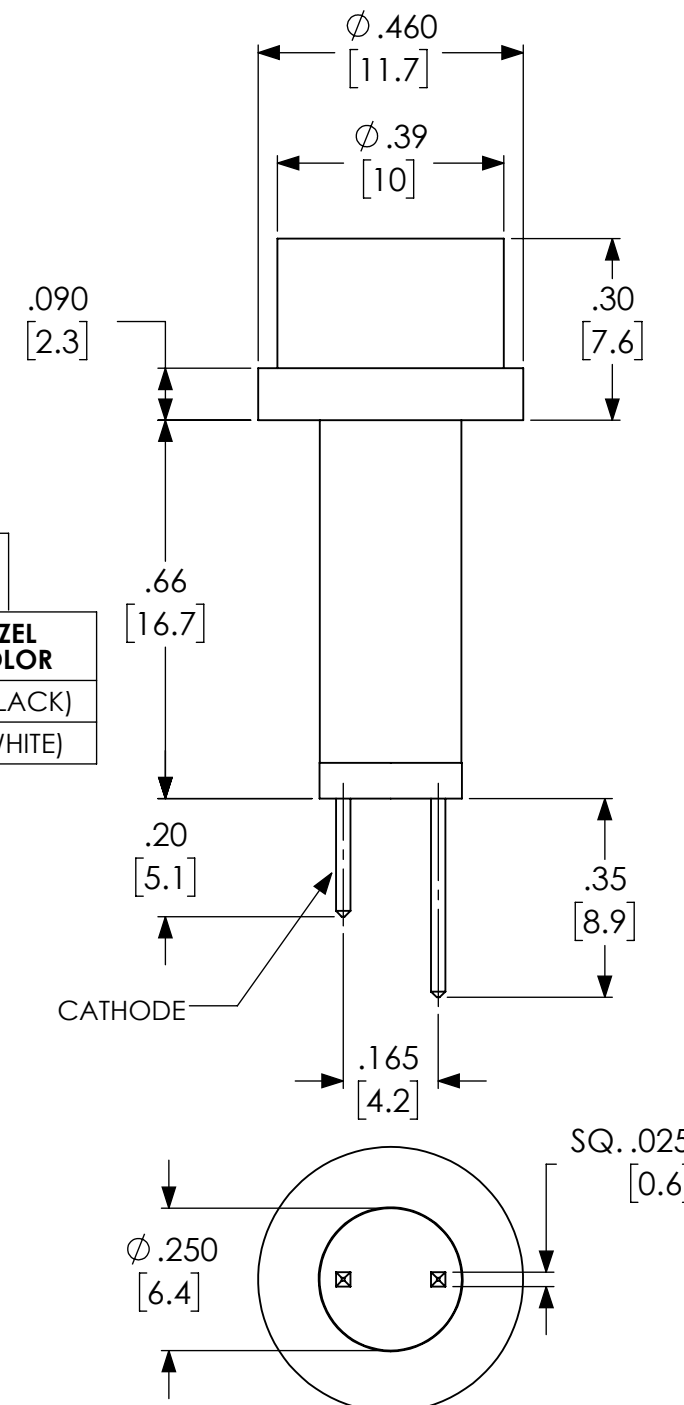
LENS COLOR
R (RED)
A (AMBER)
Y (YELLOW)
G (GREEN)
B (BLUE)
W (WATER CLEAR)
-S (SMOKE) △ 10

BEZEL COLOR
O (BLACK)
9 (WHITE)

**\*STANDARD WIRE LENGTH:**

IF THE CONFIGURATION DOES NOT INCLUDE A NUMBER AFTER THE "W" USE THIS STANDARD:  
6.0" +1.0" -0" TOTAL LENGTH (NOMINAL)/.50" STRIPPED +1/8" -0", RED ANODE/ BLACK CATHODE, 24 AWG TPB UL1061 INSULATION.

SPECIALITY LEDs - DIFFUSED ENCAPSULATION			
LED	COLOR	DESCRIPTION	V/C (TABLE)
△ -RLP	RED	LOW POWER	NOTE 5
△ -ALP	AMB	LOW POWER	NOTE 5
△ -GLP	GRN	LOW POWER	NOTE 5
△ -LRG	RED/GRN	BI-COLOR, RED CATHODE	I
△ -RAG	RED/AMB/GRN	TRI-COLOR, COMMON CATHODE	I
△ -GAR	GRN/AMB/RED	TRI-COLOR, COMMON ANODE	I



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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE INCHES (MM) SHOWN FOR REFERENCE ALL ANGLES ARE IN DEGREES		MATERIAL N/A	
GENERAL TOLERANCES		FINISH N/A	
INCH .XX ± 0.025 .XXX ± 0.010	MM .X ± 0.63 .XX ± 0.25	DRW A.SANCHEZ	12/19/17
BREAK ALL CORNERS AND SHARP EDGES .030 MAX		D-ENG A.SANCHEZ	12/19/17
DIMENSIONS INSPECTION CRITICAL ANGLE ± 1°		P-ENG O.LARA / G.RUIZ	12/20/17
THIRD ANGLE PROJECTION		QC E.LARA	12/21/17
DO NOT SCALE DRAWING PRINTED COPIES ARE UNCONTROLLED			

 12780 DANIELSON CT, SUITE A, POWAY, CA 92064 PHONE: (800)522-5546 • WWW.VCC-LITE.COM		DESC	
		.250" PANEL MOUNT REFLECTOR	
PART NO		SEE TABLES	
SIZE	DRW NO	REV	
B	461 SERIES	A	
SCALE: 1:1		SHEET: 1 OF 1	