LED Datalamp Cartridges

MEET UL and CSA SPECIFICATIONS

LED DATALAMPS

Solid state LEDs are the light source for a series of cartridges and indicator lights used for circuit voltages of 3.6 to 28 volts D.C.

Basic materials are Gallium Arsenide Phosphide and Gallium Phosphide, forming PN junction diodes which, when biased in the forward direction, give off energy in the form of light (photons). This light typically peaks at 6700 Å for the red, 5600 Å for the green, and 5800 Å for the yellow portions of the spectrum.

All of this emitted light is of the same general wave length, known as monochromatic. As a result, you cannot put different filters over it and get different colored light.

Power requirements are low and the device can be driven directly by RTL, DTL and TTL logic. Response time is measured in nano seconds.

The Datalamp cartridges with solid state LEDs can be used as direct replacements for existing cartridges using incandescent lamps operating from a DC power source.

FEATURES

- Low power requirements
- Integrated circuit compatibility
- Solid state reliability - life measured in years
- Immune to shock and vibration
- Operating temperatures -55° C to +71° C
- Interchangeable with Incandescent Datalamp Cartridges
- Transient free switching

MATERIALS AND FINISHES

- **Housing:** Aluminum. Standard finish — black anodize for high contrast ratio. Optional — clear anodize.
- **Connections:** Nickel silver pins mounted in nylon insulated header. Offset to provide polarization.
- **Lens:** High strength plastic. Permanently attached to open end of the housing. Internal fresnel ring pattern used to assure maximum light output.

Figure 12

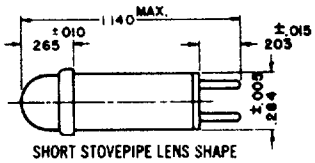
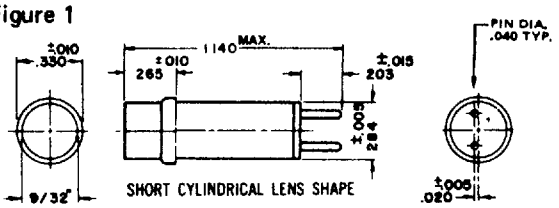


Figure 1



POLARITY: To facilitate proper installation of the cartridge, the polarity is marked (+) on the cartridge housing and the terminal base is keyed.

MOUNTING: This series Datalamp cartridge may be used with a Datalamp holder or cartridge connector with speed clip described on the facing page.

Part numbers shown in gray are normally in inventory at your Dialight Distributor.

Ordering Information

20mA DATALAMP CARTRIDGES WITH SHORT CYLINDRICAL LENS — WITH FRESNEL RINGS ☆

	TRANSPARENT LENS COLOR	3.6V DC	5V DC	6V DC	10V DC	14V DC	28V DC
WITH RED LED	Red	507-4756-3331-500	507-4757-3331-500	507-4758-3331-500	507-4759-3331-500	507-4760-3331-500	507-4761-3331-500
	White	507-4756-3335-500	507-4757-3335-500	507-4758-3335-500	507-4759-3335-500	507-4760-3335-500	507-4761-3335-500
	Clear	507-4756-3337-500	507-4757-3337-500	507-4758-3337-500	507-4759-3337-500	507-4760-3337-500	507-4761-3337-500
	10mA Units	507-4763-xxxx-500	507-4764-xxxx-500	507-4765-xxxx-500	507-4766-xxxx-500	507-4767-xxxx-500	507-4768-xxxx-500
WITH GREEN LED	Green	507-4856-3332-500	507-4857-3332-500	507-4858-3332-500	507-4859-3332-500	507-4860-3332-500	507-4861-3332-500
	White	507-4856-3335-500	507-4857-3335-500	507-4858-3335-500	507-4859-3335-500	507-4860-3335-500	507-4861-3335-500
	Clear	507-4856-3337-500	507-4857-3337-500	507-4858-3337-500	507-4859-3337-500	507-4860-3337-500	507-4861-3337-500
WITH YELLOW LED	Yellow (amber)	507-4956-3333-500	507-4957-3333-500	507-4958-3333-500	507-4959-3333-500	507-4960-3333-500	507-4961-3333-500
	White	507-4956-3335-500	507-4957-3335-500	507-4958-3335-500	507-4959-3335-500	507-4960-3335-500	507-4961-3335-500
	Clear	507-4956-3337-500	507-4957-3337-500	507-4958-3337-500	507-4959-3337-500	507-4960-3337-500	507-4961-3337-500

☆ To obtain cartridges with short stovepipe lens shape, change the first two digits in the 3rd code block from 33 to 37. Examples: 507-4856-3735-500; 507-4959-3737-500.

Solderable pins available on special order. Consult factory.

Note: The part numbers in this chart designate cartridges with standard black anodize finish.
To specify optional clear anodize finish, change the 5 in the part number to 6. Example: 507-4765-3337-600.

Also available without built in resistor, consult factory.

Datalamp Holder "C" (Page 15B) accommodates these series Datalamp cartridges. The terminals of the holder are marked "A" and "B". The "A" terminal would denote positive (+) polarity. This feature insures proper installation and wiring.

Cartridge Connectors (Cat. No. 515-0012 and 515-0074) and Speed Clip (Cat. No. 515-0051) are described on page 15B. The terminals of the connectors are marked "A" and "B". The "A" terminal would denote positive (+) polarity. This feature insures proper installation and wiring.