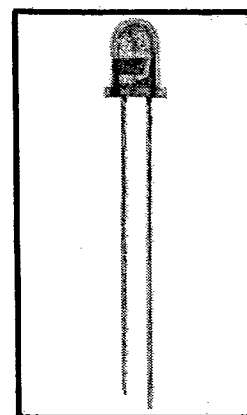


## MODEL 190 (T-1 3/4 LOW PROFILE) LEDs

DATA  
DISPLAY  
PRODUCTS

## FEATURES

- Colors: Red, Green, Amber
- Encapsulations: Diffused Tinted, Non-Diffused Tinted

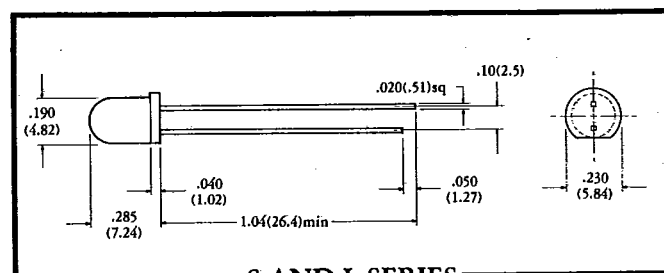


## MECHANICAL DATA

## ABSOLUTE MAXIMUM RATINGS

| PARAMETERS (TA=25°C)                    | S<br>Red | L<br>Red/Green | L<br>Amber |
|-----------------------------------------|----------|----------------|------------|
| POWER DISSIPATION (mW)                  | 100      | 100            | 60         |
| MAXIMUM CONTINUOUS CURRENT (mA)         | 30       | 30             | 20         |
| PEAK FORWARD CURRENT 5% DUTY CYCLE (mA) | 60       | 120            | 80         |
| OPERATING & STORAGE TEMPERATURE (°C)    | -55/+100 | -55/+100       | -55/+100   |

LED Soldering Temperature 1/16" Below Package Base For 5 Sec. = 260°C



S AND L SERIES

Flat on flange denotes cathode

All dimensions are in inches (mm)  
 Tolerances: .xx"(.x) ± .025"(.63), .xxx"(.xx) ± .010"(.25)  
 Specifications are subject to change without notice.

TOLERANCES

## ELECTRO-OPTICAL DATA

| SERIES                               | COLOR                 | COLOR CODE/LUMINOUS INTENSITY $I_v$<br>(mcd) at 25° C/20mA |                                   | PK WAVELENGTH $\lambda$<br>(nm) | FWD VOLTAGE $V_f$<br>Typ/Max (V) | CAPACITANCE $C$<br>(pf) |
|--------------------------------------|-----------------------|------------------------------------------------------------|-----------------------------------|---------------------------------|----------------------------------|-------------------------|
|                                      |                       | Diffused Tinted                                            | Non-Diffused Tinted               |                                 |                                  |                         |
| <b>S</b><br><i>Viewing Angle 28½</i> | Red                   | SR/2<br>70°                                                |                                   | 655                             | 1.7/2.0                          | 50                      |
| <b>L</b><br><i>Viewing Angle 28½</i> | Red<br>Green<br>Amber | LR/6<br>LG/6<br>LA/3.5<br>60°                              | LCR/17<br>LCG/19<br>LCA/19<br>34° | 635<br>565<br>585               | 2.0/3.0<br>2.2/3.0<br>2.2/3.0    | 20<br>35<br>15          |

Reverse Breakdown Voltage  $V_R$  (IR = 100μA) = 5Vdc

Information Regarding Electro-Optical Curves Can Be Found On Pages 8 &amp; 9

## ORDERING INFORMATION

MODEL NUMBER

COLOR CODE

Refer to Electro-Optical Table Above