



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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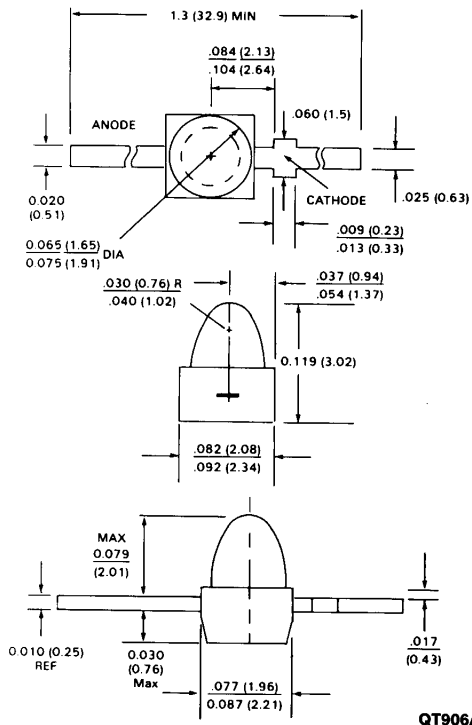
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**HIGH EFFICIENCY RED HLMP-6600/20
YELLOW HLMP-6700/20
HIGH EFFICIENCY GREEN HLMP-6800/20**

PACKAGE DIMENSIONS



QT906A

- NOTES:
1. ALL DIMENSIONS IN INCHES (mm)
2. TOLERANCE ARE ±.010 INCH UNLESS OTHERWISE SPECIFIED

DESCRIPTION

These T-3/4 square based LEDs contain an integral resistor which is in series with the emitter chip. This construction allows for the operation in circuits with 5V supply voltage; without the use of an external resistor. Color tinted, diffused epoxy packages are used for these lamps.

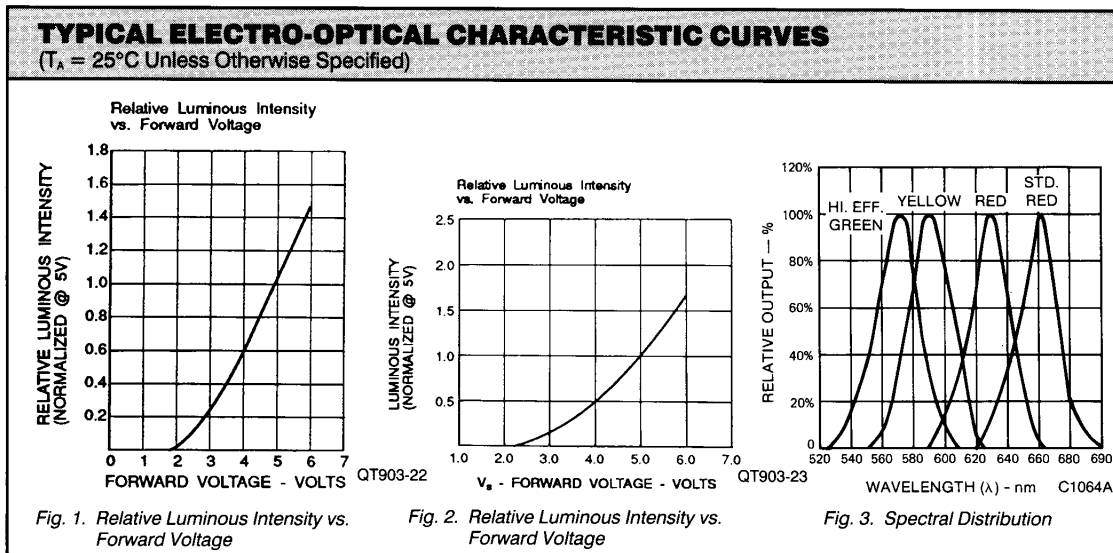
FEATURES

- Integral current limiting resistor.
- TTL compatible
- Wide viewing angle
- Solid-state reliability
- SMT lead formings and T&R available

| ABSOLUTE MAXIMUM RATING (T _A = 25°C unless otherwise specified) | | | | |
|---|-----|--------|-------|----------------|
| PARAMETER | RED | YELLOW | GREEN | UNITS |
| Power dissipation | 135 | 85 | 135 | mW |
| DC forward voltage | 6 | 6 | 6 | V |
| Lead soldering time at | 3 | 3 | 3 | Sec |
| Surface mount reflow soldering | | | | |
| Convective IR at 235°C | | | | 90 Seconds |
| Vapour phase at 213°C | | | | 3 Minutes |
| Operating temperature range | | | | -40°C to 85°C |
| Storage temperature range | | | | -55°C to 100°C |

| TYPICAL THERMAL CHARACTERISTICS | |
|--|---------|
| Thermal resistance θ_{JA} | 120°C/W |

| ELECTRO-OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified) | | | | | |
|---|------|------|------|--------|----------------------------|
| PARAMETER | MIN. | TYP. | MAX. | UNITS | TEST CONDITIONS |
| Forward current - I_f | | | | | |
| HLMP-6600/6700/6800 | | 9.6 | 13.0 | mA | $V_f = 5\text{ V}$ |
| HLMP-6620/6720/6820 | | 3.5 | 5.0 | mA | $V_f = 5\text{ V}$ |
| Reverse voltage - V_R | 5 | 30 | | V | $I_R = 100\mu\text{A}$ |
| Viewing angle - 2θ | | 90 | | Degree | |
| Luminous intensity - I_v | | | | | |
| HLMP-6600/6700/6800 | 1.3 | 5.0 | | mcd | $V_f = 5\text{ V}$ |
| HLMP-6620/6720/6820 | 0.8 | 2.0 | | mcd | $V_f = 5\text{ V}$ |
| Peak wavelength | | | | | |
| HLMP-6600/20 | | 635 | | nm | |
| HLMP-6700/20 | | 583 | | nm | |
| HLMP-6800/20 | | 565 | | nm | |
| Dominant wavelength | | | | | |
| HLMP-6600/20 | | 626 | | nm | |
| HLMP-6700/20 | | 585 | | nm | |
| HLMP-6800/20 | | 569 | | nm | |
| Spectral line half-width | | | | | |
| HLMP-6600/20 | | 40 | | nm | |
| HLMP-6700/20 | | 36 | | nm | |
| HLMP-6800/20 | | 28 | | nm | |
| Capacitance - C | | | | | |
| HLMP-6600/20 | | 11 | | pF | $V_f = , F = 1\text{ MHz}$ |
| HLMP-6700/20 | | 15 | | pF | $V_f = , F = 1\text{ MHz}$ |
| HLMP-6800/20 | | 18 | | pF | $V_f = , F = 1\text{ MHz}$ |





SUBMINIATURE T-3/4 5 - VOLT RESISTOR LAMPS

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