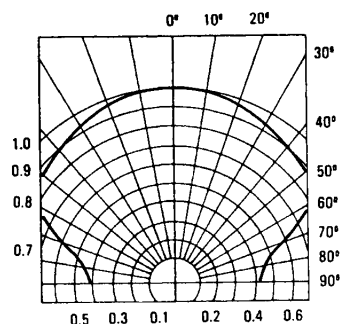
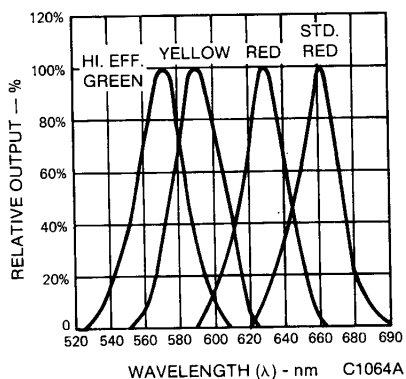


ELECTRO-OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)

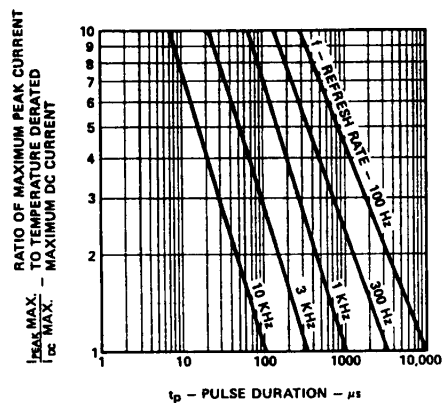
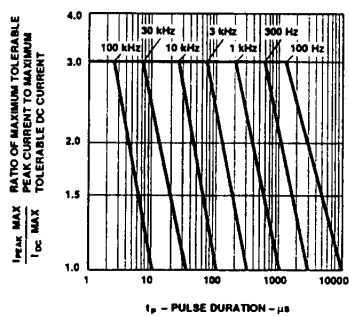
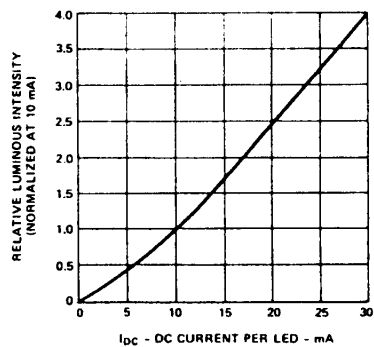
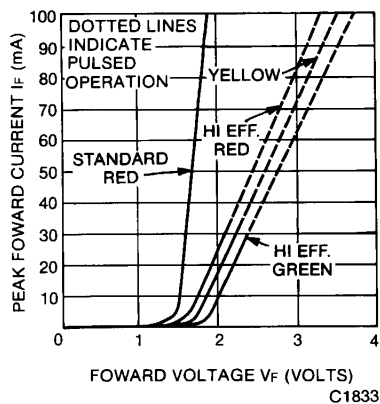
PART NUMBER	282-2	282-3	282-4	282-7	TEST CONDITIONS
Luminous intensity (mcd)					$I_F = 20\text{ mA}$
minimum	1.5	3.5	1.0	11	
typical	5.6	6.0	5.6	17	
Forward voltage (V_F)					$I_F = 20\text{ mA}$
minimum	1.7	1.7	1.7	1.7	
typical	2.0	2.0	2.1	2.0	
maximum	2.8	2.8	2.8	2.8	
Peak wavelength (nm)	640	585	565	660	$I_F = 20\text{ mA}$
Spectral line half width (nm)	45	35	30	20	$I_F = 20\text{ mA}$
Reverse breakdown voltage (V_R)	5	5	5	5	$I_R = 10\text{ }\mu\text{A}$
Viewing angle ($^\circ$)	150	150	150	150	$I_F = 20\text{ mA}$

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES ($T_A = 25^\circ\text{C}$)



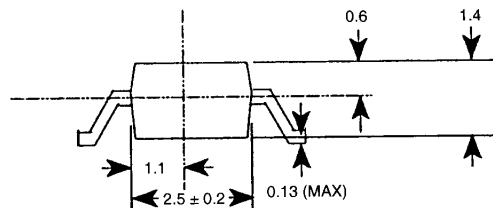
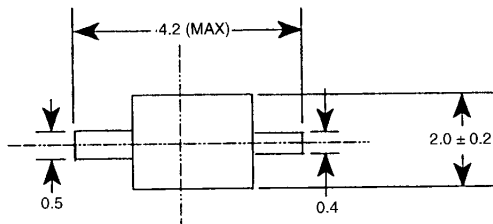
ST1711

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES ($T_A = 25^\circ\text{C}$)



**SURFACE MOUNT OPTION FOR
QTLP282-X FLAT TYPE LED LAMP
GULL WING LEAD CONFIGURATION**

LEAD BEND OPTIONS



ST1690

DESCRIPTION

These flat package LED lamps are encapsulated in an axial lead package with a clear lens. Automatic placement equipment can be used to mount these LEDs on PC boards. The lamps can be mounted using either batch or in line vapor phase reflow solder processes. Subminiature lamps are available in red, high efficiency red, yellow, and green.

FEATURES

- Gull Wing lead configuration for surface mount application
- Compatible with automatic placement equipment
- Compatible with vapor phase reflow solder processes.
- Supplied on tape and reel or in bulk packaging

ABSOLUTE MAXIMUM RATING ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)

Wave soldering temperature (1.6 mm (0.063") from body)	260° for 3 seconds
Surface Mount Reflow	
Soldering:	
Convective IR	235°C for 90 seconds
Vapor phase	215°C for 3 minutes

**ABSOLUTE MAXIMUM SOLDER RATINGS AND
ELECTRICAL/OPTICAL CHARACTERISTICS**

The absolute maximum ratings and electrical/optical specifications are identical to the basic catalogue device, except for the vapor phase soldering rating as specified above.



SURFACE MOUNT LED LAMP FLAT TYPE

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.