

HIGH EFF. RED HLMP-6305A Water Clear YELLOW **GREEN** AIGaAs RED

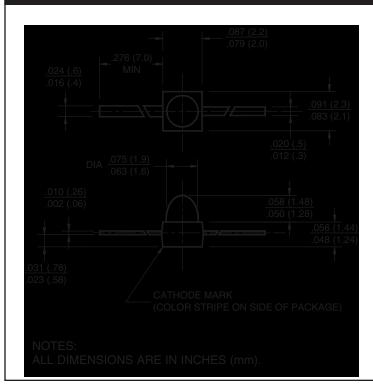
HLMP-6405A Water Clear **HLMP-6505A** Water Clear **HLMP-Q105A** Water Clear

HLMP-Q101A Red Diffused

MV6700A MV6300A MV6400A **HLMP-Q155A** Water Clear

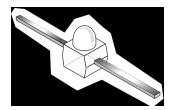
Red Diffused Yellow Diffused Green Diffused HLMP-Q150A Red Diffused

PACKAGE DIMENSIONS



FEATURES

- Subminiature T-3/4 transfer molded
- Low package profile
- Axial leads
- Wide viewing angle
- SMT versions



DESCRIPTION

These T-3/4 subminiature LED lamps feature a squarebase, transfer molded package for surface mount applications. A tinted diffused or water clear epoxy lens — available in AlGaAs red, high-efficiency red, green, and yellow — produces wide-angle beam emission and sharp on/off contrast. They are available with gullwing lead bends for top mounting, as well as yoke lead bends and Z-bends for mounting to the back of a PCB.

-50 to +100

ABSOLUTE MAXIMUM RATING c								
Parameter	HLMP-6305A MV6700A	HLMP-6405A MV6300A	HLMP-6505A MV6400A	HLMP-Q101A HLMP-Q105A HLMP-Q150A HLMP-Q155A	Units			
Power Dissipation	135	85	135	85	mW			
Average Forward Current	30	20	30	30	mA			
Peak Forward Current (1 µS pulsewidth, 0.1% DF)	90	60	90	300	mA			
Lead Soldering Time at 260°C	5	5	5	5	sec			
Operating Temperature	-55 to +100	-55 to +100	-50 to +100	-20 to +100	°C			
					 			

Storage Temperature

-55 to +100

-55 to +100

°С

-20 to +100



YELLOW GREEN **AIGaAs RED**

HIGH EFF. RED HLMP-6305A Water Clear **HLMP-6405A** Water Clear **HLMP-6505A** Water Clear **HLMP-Q105A** Water Clear **HLMP-Q101A** Red Diffused MV6700A MV6300A MV6400A

Red Diffused Yellow Diffused Green Diffused HLMP-Q150A Red Diffused **HLMP-Q155A** Water Clear

ELECTRICAL / OPTICAL CHARACTERISTICS (T _A =25°C)							
Part Number QTLP-	MV6700A	MV6300A	MV6400A	HLMP-Q150A	Condition		
Luminous Intensity (mcd)					I _F = 10mA		
Minimum	1.0	1.0	1.0	1.0*			
Typical	3.0	3.0	3.0	1.8*	*Tested at I _F = 1mA		
Forward Voltage (V)					I _F = 10mA		
Maximum	3.0	3.0	3.0	1.8*			
Typical	1.8	2.0	2.0	1.6*	*Tested at I _F = 1mA		
Peak Wavelength (nm)	635	585	565	660	I _F = 10mA		
Spectral Line Half Width (nm)	40	36	28	20	I _F = 10mA		
Reverse Voltage (V)	5	5	5	5	I _R = 100μA		
Viewing Angle (°)	50	50	50	50	I _F = 10mA		

ELECTRICAL / OPTICAL CHARACTERISTICS (T _A =25°C)							
Part Number QTLP-	HLMP- 6305A	HLMP- 6405A	HLMP- 6505A	HLMP- Q101A	HLMP-Q105A/ Q155A	Condition	
Luminous Intensity (mcd)						I _F = 10mA	
Minimum	3.0	3.0	3.0	22**	20.0**/2.0*	**Tested at I _F = 1mA	
Typical	12.0	12.0	12.0	45**	50.0**/4.0*	**Tested at I _F = 20mA	
Forward Voltage (V)						I _F = 10mA	
Maximum	3.0	3.0	3.0	2.4**	2.4**/1.8*	*Tested at I _F = 1mA	
Typical	1.8	2.0	2.0	1.8**	1.8**/1.6*	**Tested at I _F = 20mA	
Peak Wavelength (nm)	635	585	565	660	660	I _F = 10mA	
Spectral Line Half Width (nm)	40	36	28	20	20	I _F = 10mA	
Reverse voltage (V)	5	5	5	5	5	I _R = 100μA	
Viewing Angle (°)	25	25	25	50	25	I _F = 10mA	



HIGH EFF. RED HLMP-6305A YELLOW **GREEN** AlGaAs RED

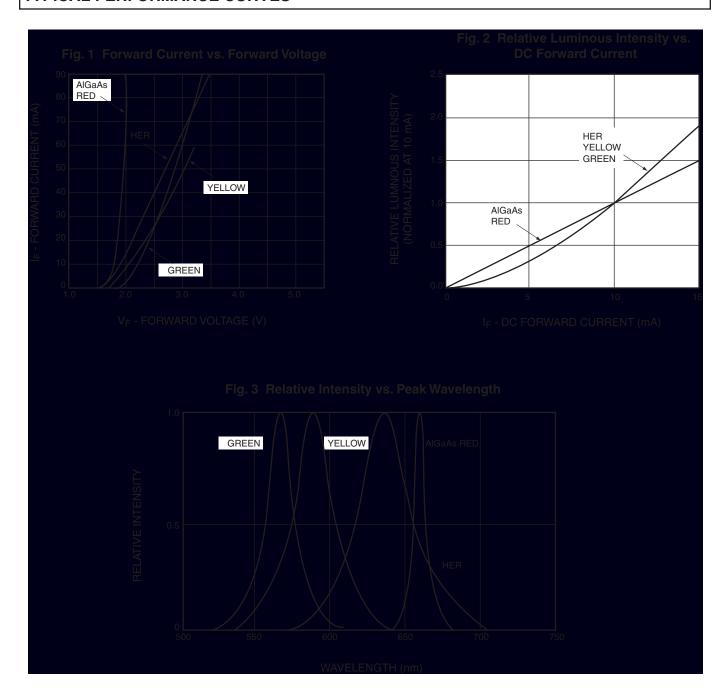
Water Clear HLMP-6405A Water Clear HLMP-6505A **Water Clear HLMP-Q105A** Water Clear

HLMP-Q101A Red Diffused

MV6700A MV6300A MV6400A **HLMP-Q150A** Red Diffused

Red Diffused Yellow Diffused Green Diffused HLMP-Q155A Water Clear

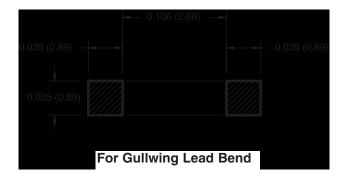
TYPICAL PERFORMANCE CURVES



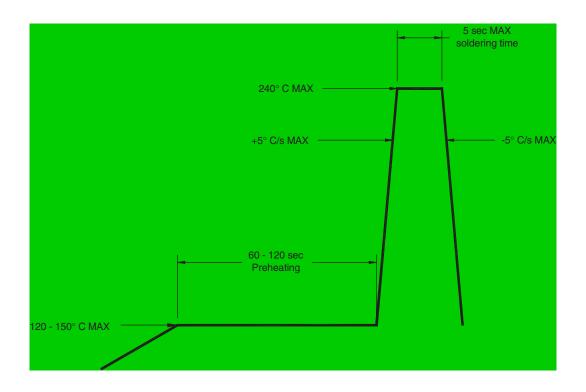


HIGH EFF. RED HLMP-6305A Water Clear **Red Diffused** MV6700A **HLMP-6405A** Water Clear **Yellow Diffused** YELLOW MV6300A **GREEN HLMP-6505A** Water Clear **Green Diffused** MV6400A **HLMP-Q105A** Water Clear **HLMP-Q150A** Red Diffused AIGaAs RED **HLMP-Q155A** Water Clear **HLMP-Q101A** Red Diffused

RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



RECOMMENDED REFLOW SOLDERING PROFILE



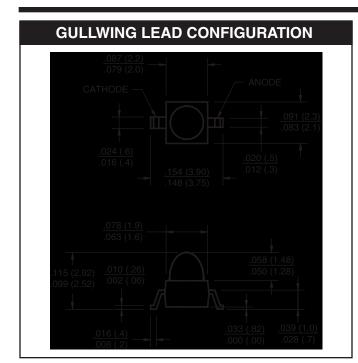


HIGH EFF. RED HLMP-6305A Water Clear YELLOW **GREEN** AIGaAs RED

HLMP-6405A Water Clear **HLMP-6505A** Water Clear

HLMP-Q105A Water Clear **HLMP-Q101A** Red Diffused MV6700A MV6300A MV6400A **HLMP-Q155A** Water Clear

Red Diffused Yellow Diffused Green Diffused HLMP-Q150A Red Diffused



FEATURES

- Available in Gullwing, Yoke and Z-bend lead formings
- · Compatible with automatic placement equipment
- Compatible with vapor phase reflow soldering processes
- Long life solid state reliability
- · Reel and tape or bulk packaging available

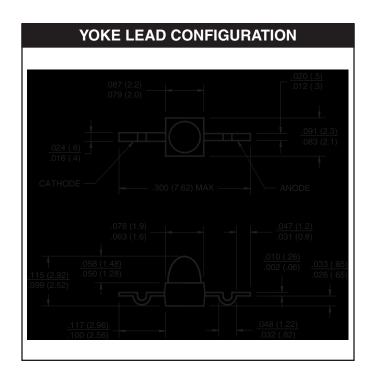
DESCRIPTION

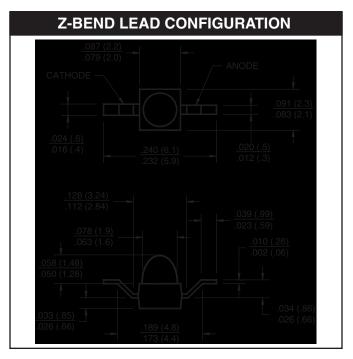
These subminiature solid state lamps are transfer molded in an axial lead package. They are available in yellow, green, high efficiency red and AlGaAs red in both diffused and water clear lens.

Automatic placement equipment can be used to mount the LEDs on the PC board. The lamps can be mounted using either batch or in line vapor phase reflow solder processes.

NOTES:

ALL DIMENSIONS ARE IN INCHES (mm)







HIGH EFF. RED HLMP-6305A Water Clear **Red Diffused** MV6700A **HLMP-6405A** Water Clear **Yellow Diffused** YELLOW MV6300A **GREEN HLMP-6505A** Water Clear **Green Diffused** MV6400A **HLMP-Q105A** Water Clear **HLMP-Q150A** Red Diffused AIGaAs RED HLMP-Q101A Red Diffused **HLMP-Q155A** Water Clear

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