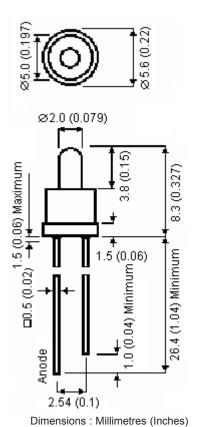


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#### MCL223PD

REVISIONS					·	·	·	·
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Veena	25/9/08	Suresh	25/9/08	Farnell	9/10/08



### **Specifications:**

Dice material : GaP.
Emitted colour : Hi-red.
Lens colour : Red diffused.
Peak wavelength : 697nm.
Viewing angle : 60 degrees.
Luminous intensity (IV) : 2.6mcd.



# Electrical/Optical Characteristics at T<sub>a</sub> = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	1.5	2.6	4.0	mcd	IF = 10mA
Viewing Angle	20 1/2	-	60	-	degrees	IF = TOTIA
Peak Emission Wavelength	λр	-	697	-		-
Dominant Wavelength	λD	-	650	-	nm	-
Spectral Line Half-width	Δλ	-	90	-		-
Forward Voltage	VF	1.7	2.1	2.6	V	IF = 10mA
Power Dissipation	Pd	-	-	45	mW	-
Peak Forward Current (Duty 1/10 at 1KHz)	IF (Peak)	-	-	50	mA	-
Recommended Operating Current	IF (Rec)	-	10	-	IIIA	-

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Veena	25/09/08
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Suresh	25/09/08
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Farnell	9/10/08

:	DRAWING TITLE:							
	2.0mm Tower LED Lamp - HI-Red							
	SIZE DWG NO.		M10001750		ELECTRONIC FILE			
=	SCALE: NTS		U.O.M.: mm (Inches)		SHEET: 1 OI	= 4		



PART NO.

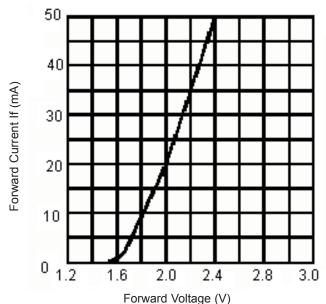
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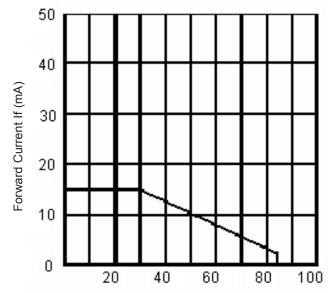
## Absolute Maximum Ratings ( $T_a = 25$ °C)

Reverse Voltage	5 Volt
Reverse Current	10μA (V <sub>R</sub> = 5V)
Operating Temperature Range	-40°C to 85°C
Storage Temperature Range	-40°C to 100°C
Lead Soldering Temperature Range [1.6mm (1/16 inch) from body]	260°C for 5 Seconds

## Bright Red (GaP $\lambda$ P = 697nm)



Forward Current vs. Forward Voltage



Ambient Temperature T<sub>a</sub> = °C

Forward Current Derating Curve

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Suresh	25/09/08
APPROVED BY:	DATE:
Farnell	9/10/08

DRAWI	NG TITLE:						
2.0mm Tower LED Lamp - HI-			np - HI-Red				
SIZE	DWG NO.	M10001750		ELECTRONIC FILE R			
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SCALE: NTS		U.O.M.: mm (Inches)		SHEET: 2 OI	= 4		

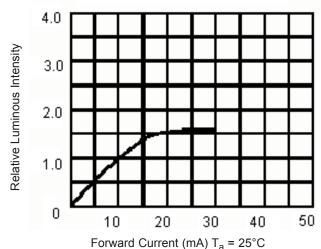


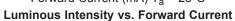
PART NO.

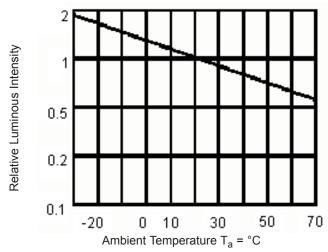
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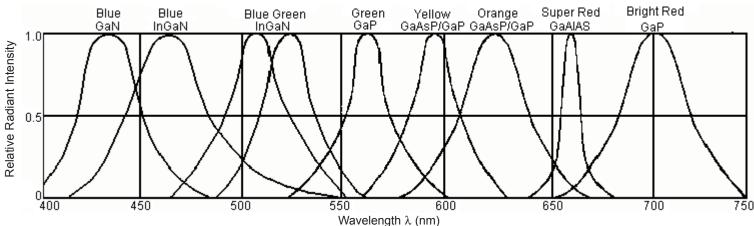
#### Bright Red (GaP $\lambda$ P = 697nm)







**Luminous Intensity vs. Ambient Temperature** 



Relative Intensity vs. Wavelength

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Suresh	25/09/08
APPROVED BY:	DATE:
Farnell	9/10/08

DRAWI	NG TITLE:		
		2.0mm Tower LEI	D Lamp - HI-Red
SIZE	DWG NO	·	ELECTRONIC FILE

 SIZE A
 DWG NO.
 M10001750
 ELECTRONIC FILE L223PD\_DWG
 REV A

 SCALE: NTS
 U.O.M.: mm (Inches)
 SHEET: 3 OF 4



PART NO.

MCL223PD

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#### **Part Number Table**

Description	Part Number
LED, 2mm, 60°, Hi-Red	MCL223PD

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

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	CHECKED BY:	DATE:
	Suresh	25/09/08
	APPROVED BY:	DATE:
	Farnell	9/10/08

DRAWING TITLE:						
		2.0mm Tower LED Lamp - HI-Red				
SIZE	DWG NO.	M10001750	ELECTRONIC FILE L223PD_DWG			

SCALE: NTS U.O.M.: mm (Inches)

SHEET: 4 OF 4

**REV** 

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