

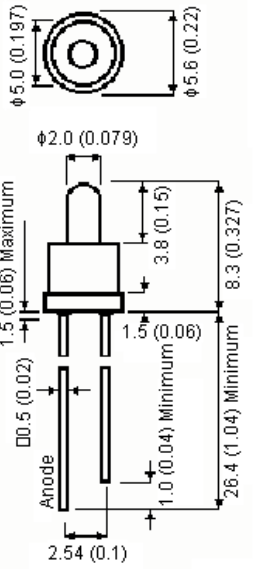


PART NO.

MCL223AD

REVISIONS

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



Dimensions : Millimetres (Inches)

Specifications:

Dice material : GaAsP on GaP.  
 Emitted colour : Orange red.  
 Lens colour : Orange diffused.  
 Peak wavelength : 635nm.  
 Viewing angle : 60 degrees.  
 Luminous intensity (IV) : 8.0mcd.



Electrical/Optical Characteristics at  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	4.0	8.0	12	mcd	IF = 20mA
Viewing Angle	$2\theta$ 1/2	-	60	-	degrees	
Peak Emission Wavelength	$\lambda_p$	-	635	-	nm	-
Dominant Wavelength	$\lambda_D$	-	625	-		-
Spectral Line Half-width	$\Delta\lambda$	-	45	-		-
Forward Voltage	VF	1.6	2.0	2.6	V	IF = 20mA
Power Dissipation	Pd	-	-	85	mW	-
Peak Forward Current (Duty 1/10 at 1KHz)	IF (Peak)	-	-	100	mA	-
Recommended Operating Current	IF (Rec)	-	20	-		-

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

DRAWING TITLE:

2.0mm Tower LED Lamp - Orange

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001749	L223AD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 1 OF 4	



PART NO.

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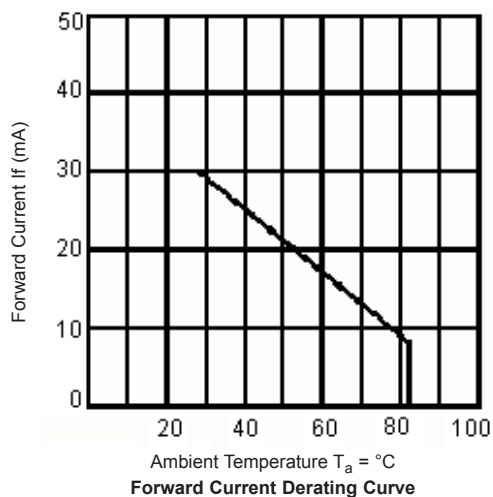
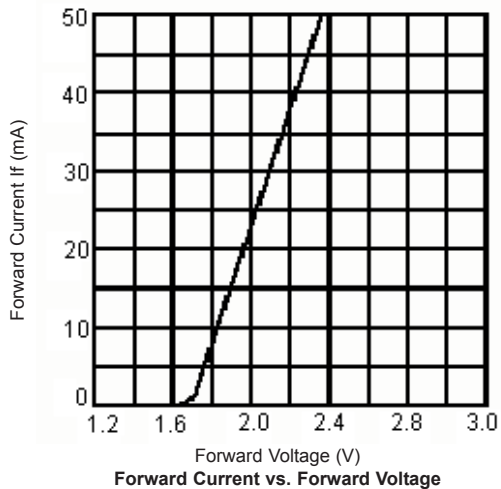
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**Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )**

Reverse Voltage	5 Volt
Reverse Current	10 $\mu\text{A}$ ( $V_R = 5\text{V}$ )
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

**Orange (GaAsP/CaP  $\lambda_P = 635\text{nm}$ )**



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Farnell	9/10/08

<b>DRAWING TITLE:</b>			
2.0mm Tower LED Lamp - Orange			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
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<b>SCALE: NTS</b>		<b>U.O.M.: mm (Inches)</b>	<b>SHEET: 2 OF 4</b>



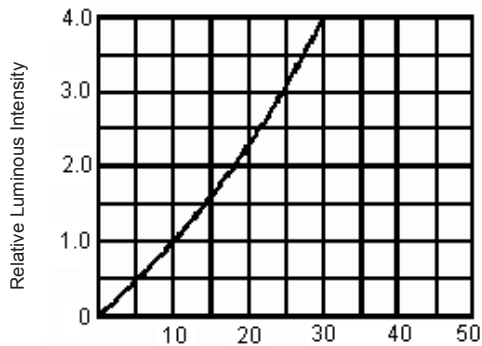
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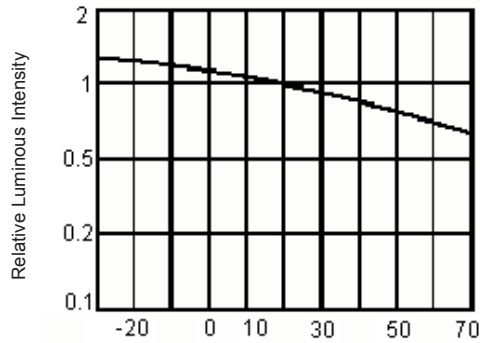
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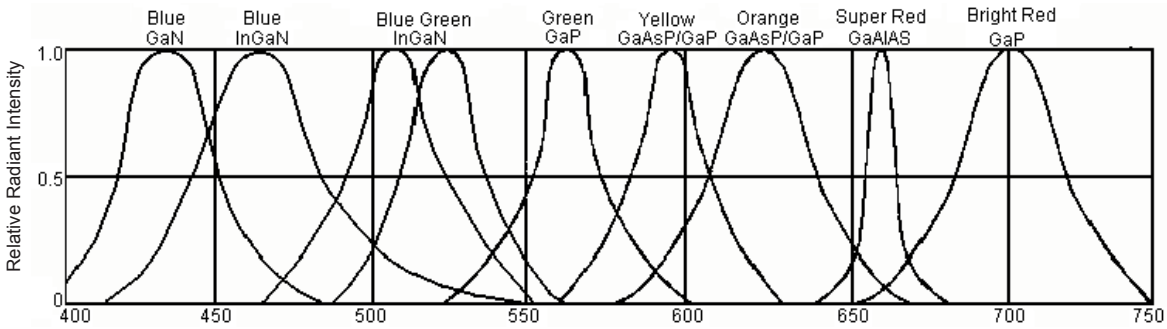
Orange (GaAsP/CaP  $\lambda_P = 635\text{nm}$ )



Forward Current (mA)  $T_a = 25^\circ\text{C}$   
Luminous Intensity vs. Forward Current



Ambient Temperature  $T_a = ^\circ\text{C}$   
Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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

DRAWING TITLE:

2.0mm Tower LED Lamp - Orange

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001749	L223AD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 3 OF 4	



PART NO.

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Part Number Table

Description	Part Number
LED, 2mm, 60°, Orange	MCL223AD

<http://www.farnell.com>  
<http://www.newark.com>  
<http://www.cpc.co.uk>

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Farnell	9/10/08

DRAWING TITLE:

2.0mm Tower LED Lamp - Orange

<b>SIZE</b> A	<b>DWG NO.</b> M10001749	<b>ELECTRONIC FILE</b> L223AD_DWG	<b>REV</b> A
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<b>SCALE:</b> NTS	<b>U.O.M.:</b> mm (Inches)	<b>SHEET:</b> 4 OF 4
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