

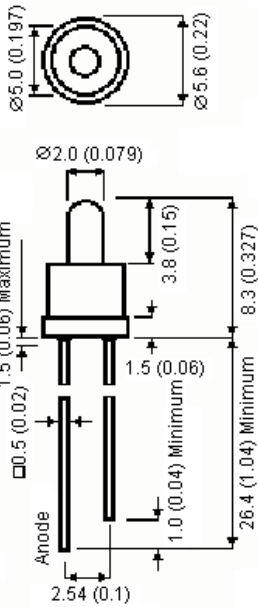


PART NO.

MCL223MD

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 : Hi-eff red.
 Lens colour : Red diffused.
 Peak wavelength : 635nm.
 Viewing angle : 60 degrees.
 Luminous intensity (IV) : 7.8mcd.



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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	3.5	7.8	11.5	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	60	-	degrees	
Peak Emission Wavelength	λ_p	-	635	-	nm	-
Dominant Wavelength	λ_D	-	625	-		-
Spectral Line Half-width	$\Delta\lambda$	-	45	-		-
Forward Voltage	V _F	1.6	2.0	2.6	V	IF = 20mA
Power Dissipation	P _d	-	-	85	mW	-
Peak Forward Current (Duty 1/10 at 1KHz)	IF (Peak)	-	-	100	mA	-
Recommended Operating Current	IF (Rec)	-	20	-		-

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

DRAWING TITLE:

2.0mm Tower LED Lamp - HE-Red

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001746	L223MD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 1 OF 4	



PART NO.

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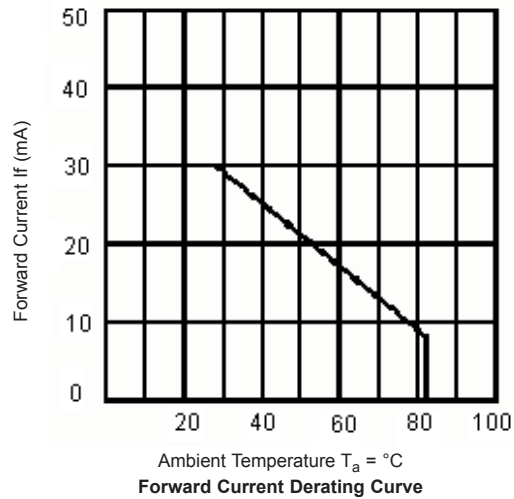
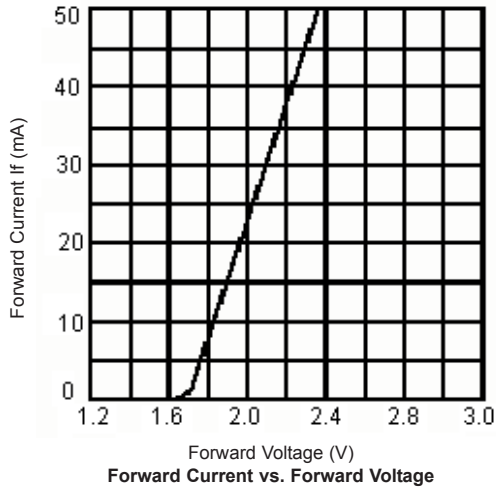
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Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Reverse Voltage	5 Volt
Reverse Current	10 μA ($V_R = 5\text{V}$)
Operating Temperature Range	-40 $^\circ\text{C}$ to 85 $^\circ\text{C}$
Storage Temperature Range	-40 $^\circ\text{C}$ to 100 $^\circ\text{C}$
Lead Soldering Temperature Range [1.6mm (1/16 inch) from body]	260 $^\circ\text{C}$ for 5 Seconds

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



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Farnell	9/10/08

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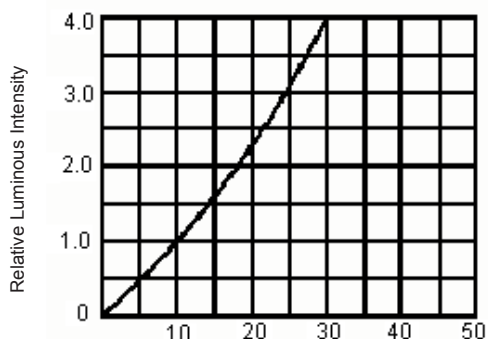
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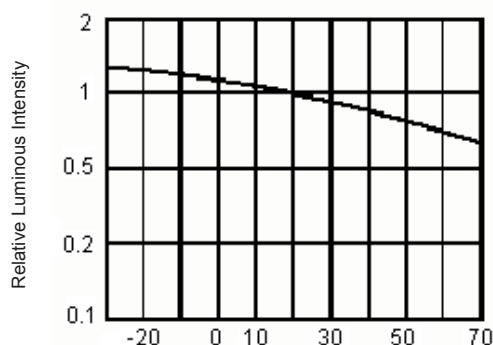
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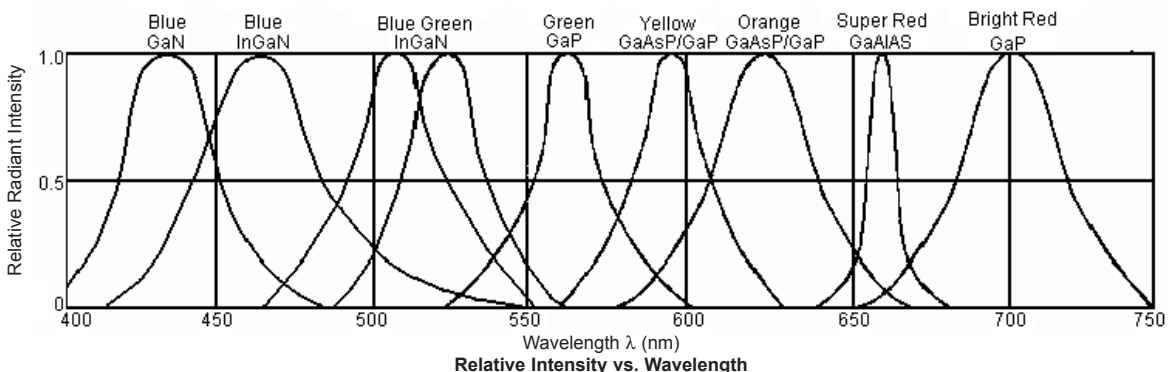
Orange (GaAsP/CaP $\lambda_P = 635\text{nm}$)



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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APPROVED BY:	DATE:
Farnell	9/10/08

DRAWING TITLE:

2.0mm Tower LED Lamp - HE-Red

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001746	L223MD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 3 OF 4	



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Part Number Table

Description	Part Number
LED, 2mm, 60°, He-Red	MCL223MD

<http://www.farnell.com>

<http://www.newark.com>

<http://www.cpc.co.uk>

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DRAWING TITLE:

2.0mm Tower LED Lamp - HE-Red

SIZE A	DWG NO. M10001746	ELECTRONIC FILE L223MD_DWG	REV A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 4 OF 4