

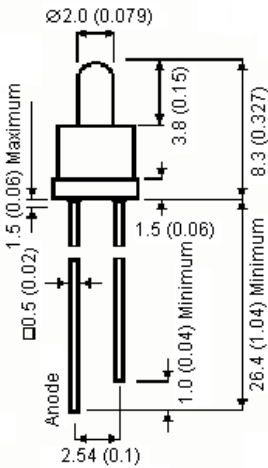
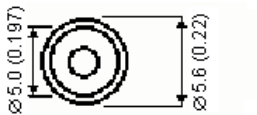


PART NO.

MCL223SRD

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 : AlAGas.
 Emitted colour : Super red.
 Lens colour : Red diffused.
 Peak wavelength : 660nm.
 Viewing angle : 60 degrees.
 Luminous intensity (IV) : 25mcd.



Electrical/Optical Characteristics at T_a = 25°C

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	13	25	40	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	60	-	degrees	
Peak Emission Wavelength	λ _p	-	660	-	nm	-
Dominant Wavelength	λ _D	-	643	-		-
Spectral Line Half-width	Δλ	-	20	-		-
Forward Voltage	V _F	1.5	1.85	2.5	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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TOLERANCES:
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DRAWN BY:	DATE:
Veena	25/09/08
CHECKED BY:	DATE:
Suresh	25/09/08
APPROVED BY:	DATE:
Farnell	09/10/08

DRAWING TITLE:			
2.0mm Tower LED Lamp - Super-Red			
SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001751	L223SRD_DWG	A
SCALE: NTS	U.O.M.: mm (Inches)	SHEET: 1 OF 4	



PART NO.

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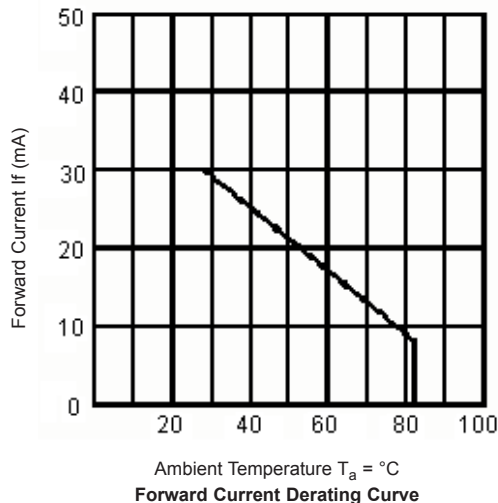
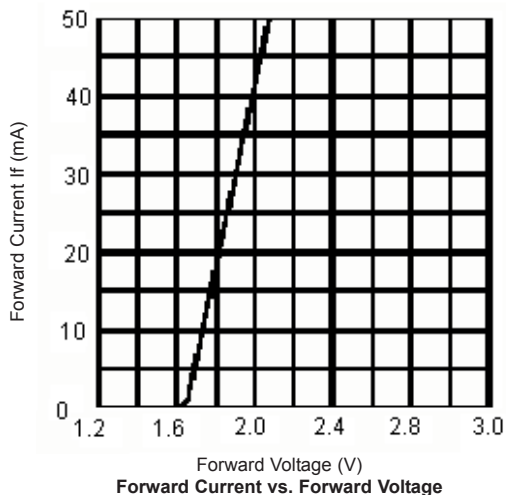
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Absolute Maximum Ratings (T_a = 25°C)

Reverse Voltage	5 Volt
Reverse Current	10μA (V _R = 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

Super Red (GaAlAs) λP = 660nm



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

DRAWING TITLE:

2.0mm Tower LED Lamp - Super-Red

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001751	L223SRD_DWG	A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 2 OF 4



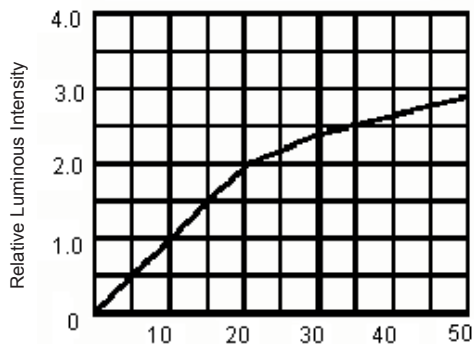
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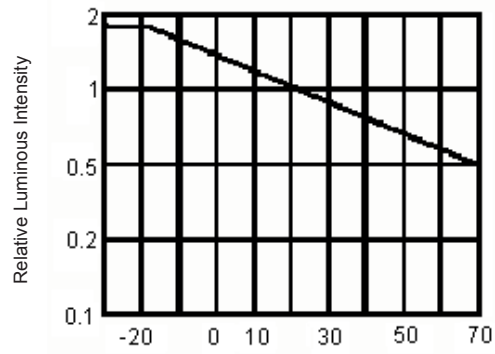
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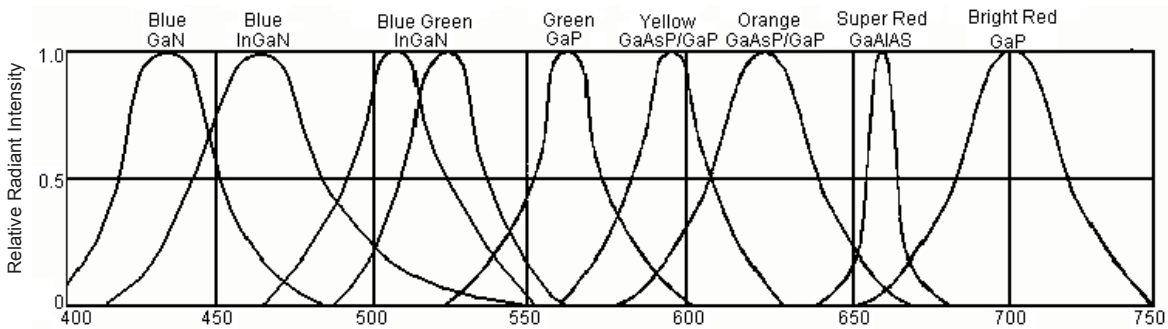
Super Red (GaAlAs) $\lambda P = 660nm$



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



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



Wavelength λ (nm)
Relative Intensity vs. Wavelength

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



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Part Number Table

Description	Part Number
LED, 2mm, 60°, Super-Red	MCL223SRD

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

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