

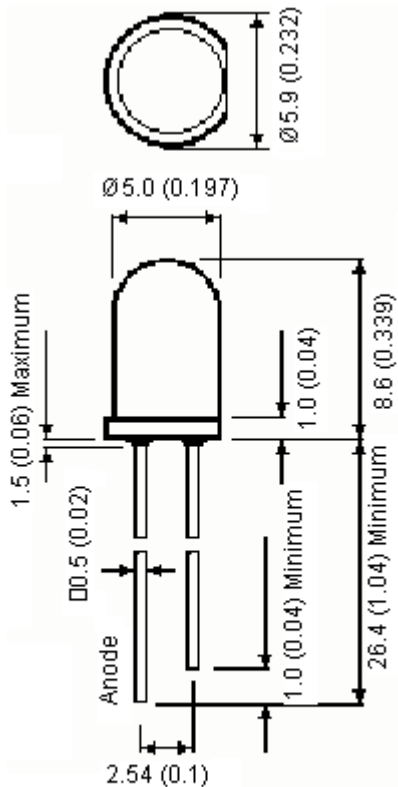


PART NO.

MCLF056MD

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Geetha	30/5/08	Suresh	30/5/08	G. C	13/6/08



Features:

- Built-in IC chip, flashes lamp on and off to attract attention.
- Operating voltage range : 3V-10V dc.
- 1/4 duty cycle.
- Blinking frequency : 2.4Hz ($V_{dd} = 5V$).
- Frequency tolerance : 20%.

Specifications:

- Dice material : GaAsP on GaP.
- Emitted color : Hi-eff red.
- Lens color : Red diffused.
- Peak wavelength : 635nm.
- Viewing angle : 45 degrees.
- Luminous intensity (IV) : 10mcd.

Electrical Optical Characteristics at $T_a = 25^\circ C$

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test Condition
Luminous Intensity	I_V	-	10	-	mcd	$I_f = 20mA$
Peak Emission Wavelength	λ_p	-	635	-	nm	Measurement at Peak
Dominant Wavelength	λ_d	-	625	-		$I_f = 20mA$
Operating Voltage	V_{dd}	3	5	10	V	-
Blinking Frequency	F_{blk}	2.0	2.4	2.8	Hz	-
Reverse Current	I_R	-	-	100	μA	$V_R = 5V$



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TOLERANCES: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.	DRAWN BY:	DATE:	DRAWING TITLE: 5.0mm Round LED Lamp - HE Red			
	Geetha	30/05/08				
	CHECKED BY:	DATE:	SIZE	DWG NO.	ELECTRONIC FILE	REV
	Suresh	30/05/08	A	M10001205	LF056MD_DWG	A
	APPROVED BY:	DATE:	SCALE: NTS		U.O.M.: mm (Inches)	
G.Cook	13/06/08					



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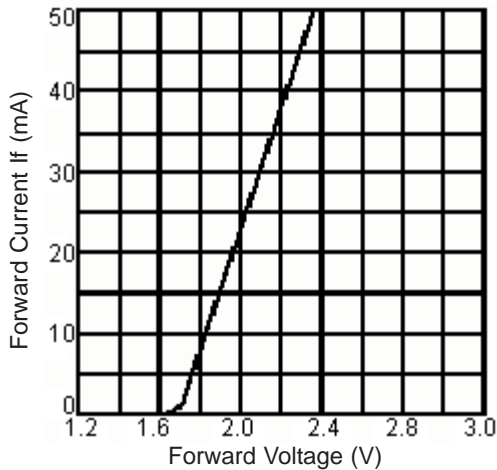
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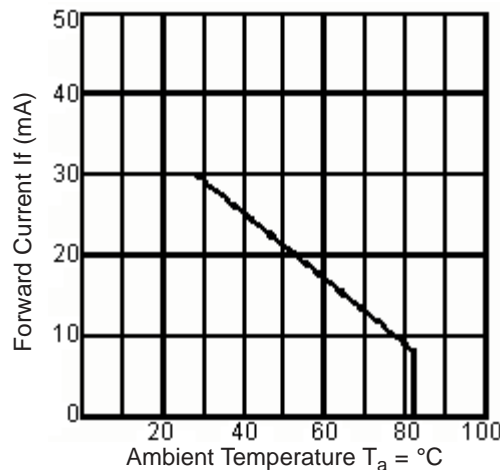
Absolute Maximum Ratings at T_a = 25°C

Parameter	Maximum	Unit
Continuous Forward Current	30	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +80°C	
Storage Temperature Range		
Lead Soldering Temperature [4mm (0.157 inch) from body]	260°C for 5 Seconds	

Orange (GaAsP/CaP λP = 635nm)



Forward Current vs. Forward Voltage



Forward Current Derating Curve

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CHECKED BY:	DATE:
Suresh	30/05/08
APPROVED BY:	DATE:
G.Cook	13/06/08

DRAWING TITLE:

5.0mm Round LED Lamp - HE Red

SIZE A	DWG NO. M10001205	ELECTRONIC FILE LF056MD_DWG	REV A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 2 OF 4



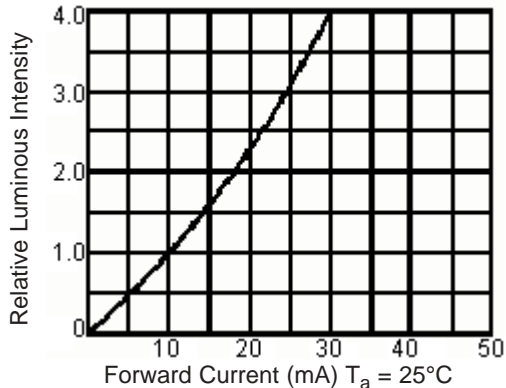
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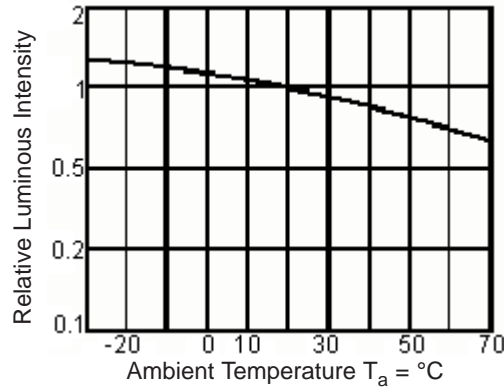
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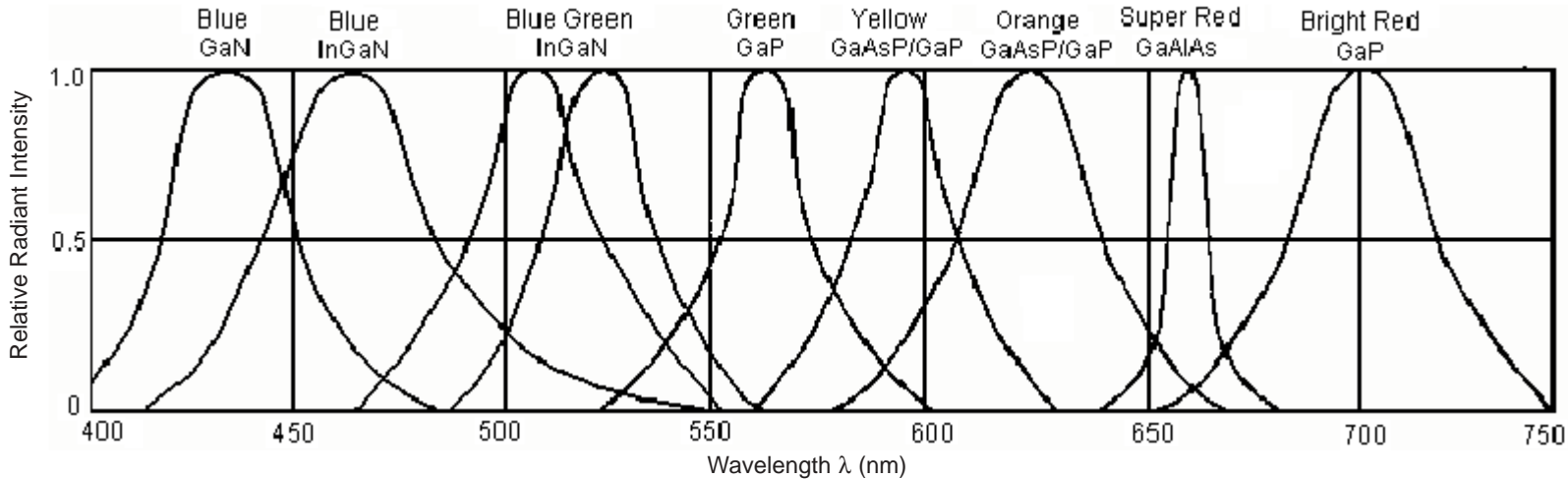
Orange (GaAsP/CaP $\lambda_P = 635\text{nm}$)



Luminous Intensity vs. Forward Current



Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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CHECKED BY:	DATE:
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APPROVED BY:	DATE:
G.Cook	13/06/08

DRAWING TITLE:

5.0mm Round LED Lamp - HE Red

SIZE A	DWG NO. M10001205	ELECTRONIC FILE LF056MD_DWG	REV 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, Flashing, 5mm, HE-Red	MCLF056MD

<http://www.farnell.com>

<http://www.newark.com>

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

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SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10001205	LF056MD_DWG	A
SCALE: NTS		U.O.M.: mm (Inches)	SHEET: 4 OF 4