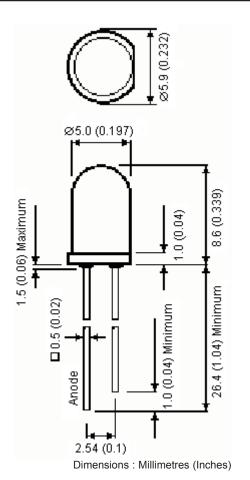


PART N
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### MCL053BT

REVISIONS								
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Rekha	29/5/08	Suresh	29/5/08	G. C	13/6/08



## **Specifications:**

Dice material : GaAsP on GaP.

Emitted color : Amber.

Lens color : Amber transparent.

Peak wavelength : 610nm.
Viewing angle : 16 degrees.
Luminous intensity (IV) : 45mcd.



SHEET: 1

OF 4

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

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test
Luminous Intensity	IV	23	45	70	mcd	IF = 20mA
Viewing Angle	20 1/2	-	16	-	degrees	IF - ZUITA
Peak Emission Wavelength	• p	• p - 610 -		-		
Dominant Wavelength	• 10	-	605	-	nm	-
Spectral Line Half-Width	Δλ	-	40	-		-
Forward Voltage	VF	1.7	2.1	2.6	V	IF = 20mA
Power Dissipation	Pd	-	-	85	-	-
Peak Forward Current (Duty 1/10 at 1KHz)	IF (Peak)	-	-	100	-	-
Recommended Operating Current	IF (Rec)	-	20	-	mA	-

SCALE: NTS

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DRAWN BY:	DATE:
Rekha	29/05/08
CHECKED BY:	DATE:
Suresh	29/05/08
APPROVED BY:	DATE:
G.Cook	13/06/08

DRAW	ING TITLE:	5.0mm Round L	.ED Lamp - Amber	
SIZE	DWG NO.	M10001174	ELECTRONIC FILE MCL053BT_DWG	RE\ A

U.O.M.: mm (Inches)



PART NO.

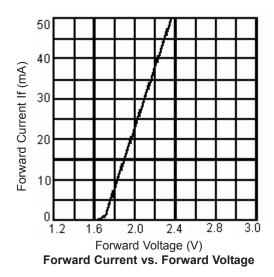
MCL053BT

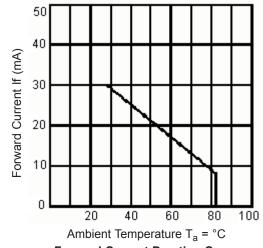
REVISIONS								
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Rekha	29/5/08	Suresh	29/5/08	G. C	13/6/08

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

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

# Amber (GaAsP/CaP $\lambda$ P = 610nm)





**Forward Current Derating Curve** 

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Rekha	29/05/08
CHECKED BY:	DATE:
Suresh	29/05/08
APPROVED BY:	DATE:
G.Cook	13/06/08

DRAWI	NG TITLE:						
5.0mm Round LED Lamp - Amber							
SIZE	DWG NO.	M10001174		TRONIC FII 53BT_DW			REV <b>A</b>
SCAL	E: NTS	U.O.M.: mm (Inches)		SHEET:	2	OF	4

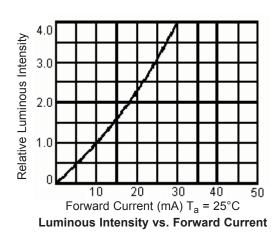


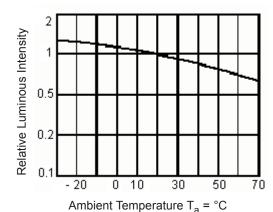
PART NO.

MCL053BT

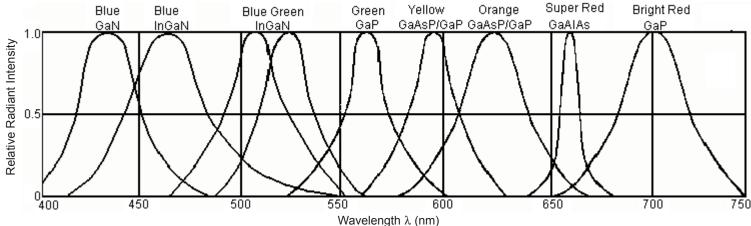
REVISIONS								
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Rekha	29/5/08	Suresh	29/5/08	G. C	13/6/08

## Amber (GaAsP/CaP $\lambda$ P = 610nm)





Luminous Intensity vs. Ambient Temperature



Relative Intensity vs. Wavelength

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Rekha	29/05/08
CHECKED BY:	DATE:
Suresh	29/05/08
APPROVED BY:	DATE:
G.Cook	13/06/08

DRAWI	NG TITLE:			
5.0mm Round LED Lamp - Amber				
SIZE	DWG NO.	N/1000117/	ELECTRONIC FILE	REV
Δ		M10001174	MCL053BT DWG	l A

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

SHEET: 3 OF 4



PART NO.

MCL053BT

REVISIONS								
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Rekha	29/5/08	Suresh	29/5/08	G. C	13/6/08

### **Part Number Table**

Description	Part Number		
LED, 5mm, 16°, Amber	MCL053BT		

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

SHEET: 4

OF 4

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**TOLERANCES:** 

	DRAWN BY:	DATE:		
	Rekha	29/05/08		
	CHECKED BY:	DATE:		
	Suresh	29/05/08		
	APPROVED BY:	DATE:		
	G.Cook	13/06/08		

SCALE: NTS

DRAWING TITLE:			5.0mm Round LED Lamp - Amber					
	SIZE <b>A</b>	DWG NO.	M10001174	ELECTRONIC FILE MCL053BT_DWG	RE\ A			

U.O.M.: mm (Inches)