

# LT9040□ Series

Case mold type  
LED Panel Displays

## Model No.

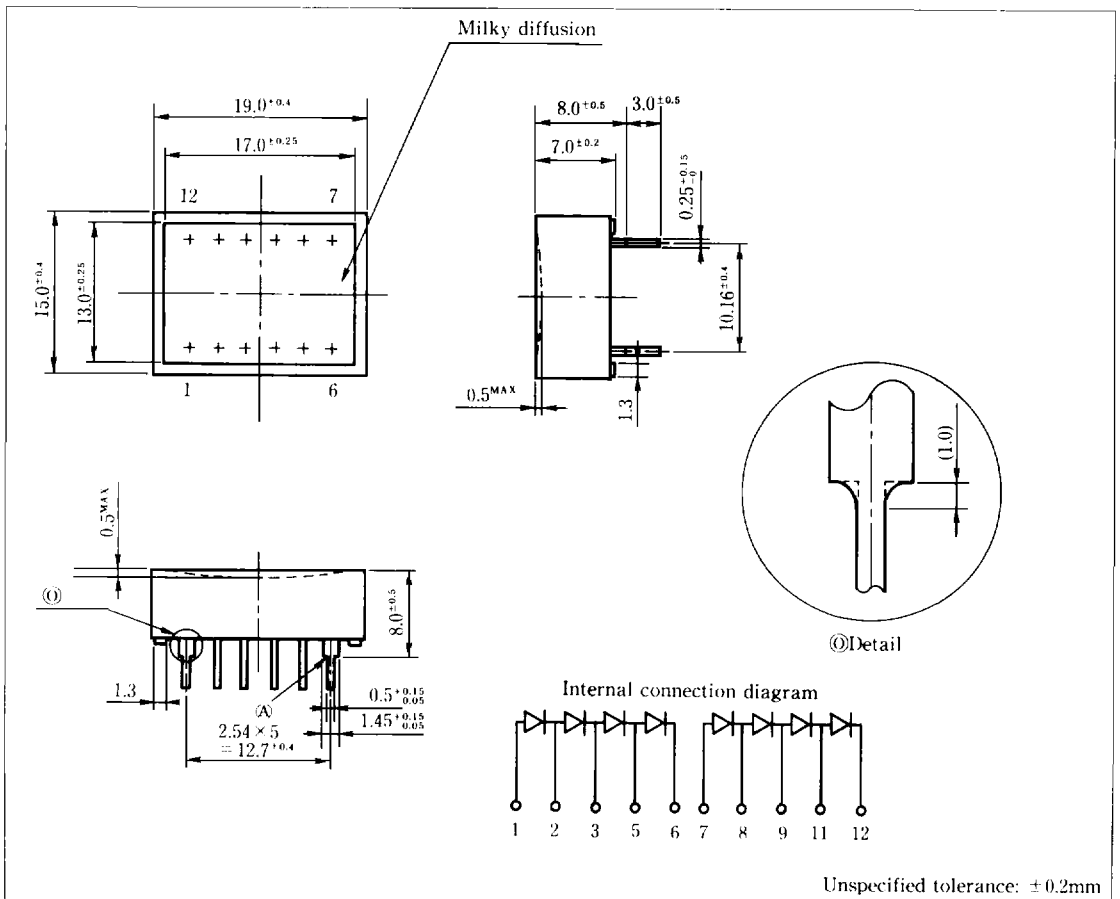
LT9040D	Red	GaAsP/GaP
LT9040H	Yellow	GaAsP/GaP
LT9040E	Yellow-green	GaP

## Features

1. Radiation size 13.0×17.0
2. Case mold type

## Outline Dimensions

(Unit : mm)



## LT9040□

## ■ Absolute Maximum Ratings\*1

(T<sub>a</sub> = 25°C)

Parameter	Symbol	LT9040D				Unit
		LT9040H				
		LT9040E				
*2 Power dissipation	P	440				mW
*1 Continuous forward current	I <sub>F</sub>	20				mA
Peak forward current	I <sub>FM</sub>	—				mA
*1 Derating factor	DC	—	0.36			mA/°C
	Pulse	—	—			mA/°C
*1 Reverse voltage	V <sub>R</sub>	5				V
Operating temperature	T <sub>opr</sub>	- 20 to +70				°C
Storage temperature	T <sub>stg</sub>	- 30 to +80				°C
*3 Soldering temperature	T <sub>sol</sub>	260(within 5 seconds)				°C

\*1 Per chip

\*2 Per lamp : 8 chips

\*3 At the ④ position of outline dimensions

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**LT9040D(Red)**

**■ Electro-optical Characteristics\*1**

(Ta = 25°C)

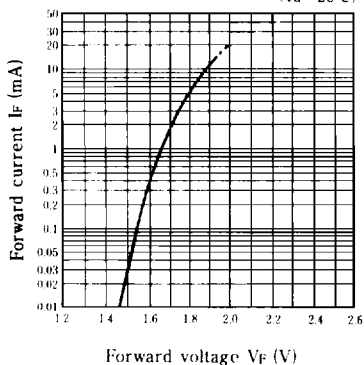
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	$V_f$	LT9040D	$I_f = 15\text{mA}$	—	1.95	2.75	V
*4 Luminous intensity	$I_v$	LT9040D	$I_f = 15\text{mA}$	35.5	112	—	mcd
Peak emission wavelength	$\lambda_p$	LT9040D	$I_f = 15\text{mA}$	—	635	—	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT9040D	$I_f = 15\text{mA}$	—	35	—	nm
Reverse current	$I_R$	LT9040D	$V_R = 4\text{V}$	—	—	10	$\mu\text{A}$
Response frequency	$f_c$			—	—	—	MHz

\*1 Per chip

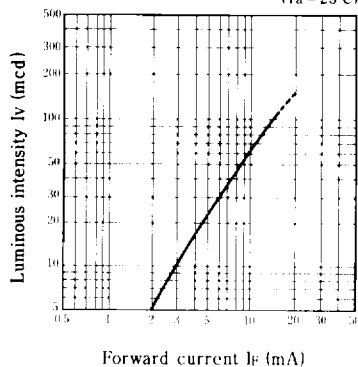
\*4 Per lamp : 8 chips, Tolerance :  $\pm 30\%$

**■ Characteristics Diagrams**

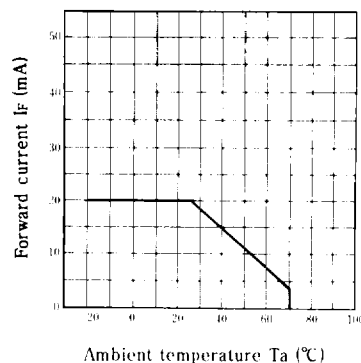
**Forward Current vs. Forward Voltage** (Ta = 25°C)



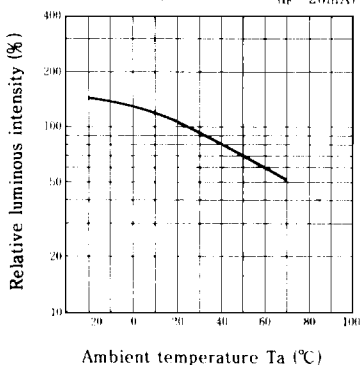
**Luminous Intensity vs. Forward Current** (Ta = 25°C)



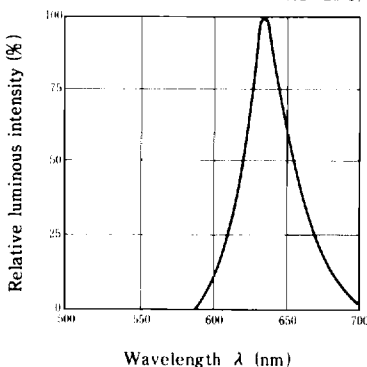
**Forward Current Derating Curve**



**Relative Luminous Intensity vs. Ambient Temperature** (If = 20mA)



**Spectrum Distribution** (Ta = 25°C)



**LT9040H(Yellow)/LT9040E(Yellow-green)**

**■Electro-optical Characteristics\*1**

(Ta = 25°C)

Parameter	Symbol	Model No.	conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	LT9040H	I <sub>F</sub> = 15mA	—	1.95	2.75	V
		LT9040E	I <sub>F</sub> = 15mA	—	2.05	2.75	
*5 Luminous intensity	I <sub>V</sub>	LT9040H	I <sub>F</sub> = 15mA	35.5	112	—	mcd
		LT9040E	I <sub>F</sub> = 15mA	60	126	—	
		LT9040H	I <sub>F</sub> = 15mA	—	585	—	
Peak emission wavelength	λ <sub>p</sub>	LT9040H	I <sub>F</sub> = 15mA	—	585	—	nm
		LT9040E	I <sub>F</sub> = 15mA	—	565	—	
Spectrum radiation bandwidth	Δλ	LT9040H	I <sub>F</sub> = 15mA	—	30	—	nm
		LT9040E	I <sub>F</sub> = 15mA	—	30	—	
Reverse current	I <sub>R</sub>	LT9040H	V <sub>R</sub> = 4V	—	—	10	μA
		LT9040E	V <sub>R</sub> = 4V	—	—	10	
Response frequency	f <sub>c</sub>	LT9040H	—	—	—	—	MHz
		LT9040E	—	—	—	—	

\*1 Per chip

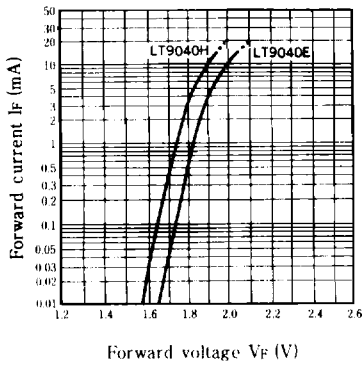
\*5 Per lamp : 8 chips, Tolerance : ±30%

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**■Characteristics Diagrams**

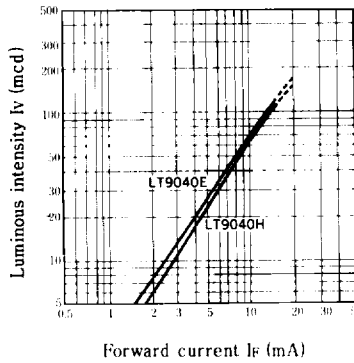
**Forward Current vs. Forward Voltage**

(Ta = 25°C)

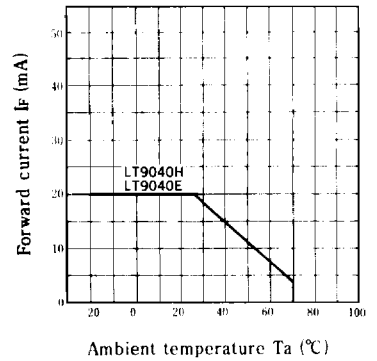


**Luminous Intensity vs. Forward Current**

(Ta = 25°C)

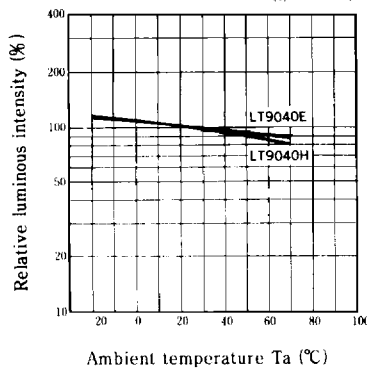


**Forward Current Derating Curve**



**Relative Luminous Intensity vs. Ambient Temperature**

(I<sub>F</sub> = 15mA)



**Spectrum Distribution**

(Ta = 25°C)

