



## LT9040□

## ■Absolute Maximum Ratings

(Ta= 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

(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
*1 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

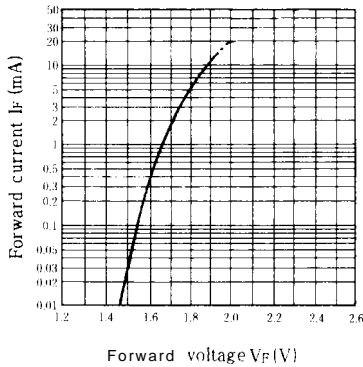
\*1 Per chip

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

■ Characteristics Diagrams

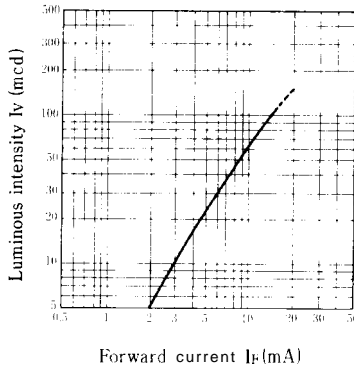
Forward Current vs. Forward Voltage

(Ta = 25°C)

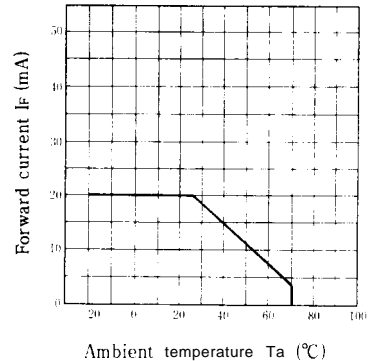


Luminous Intensity vs. Forward Current

(Ta = 25°C)

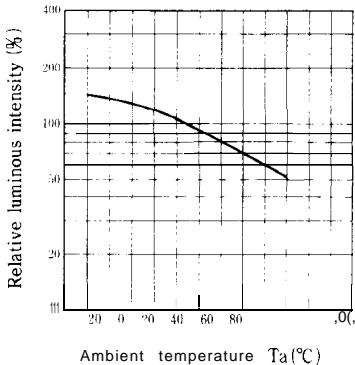


Forward Current Derating Curve



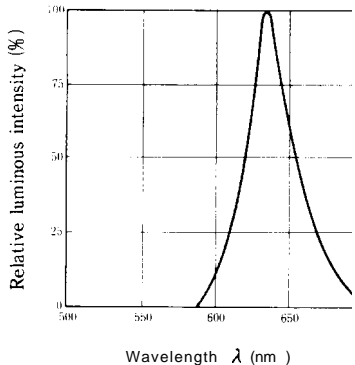
Relative Luminous Intensity vs. Ambient Temperature

(If = 20mA)



Spectrum Distribution

(Ta = 25°C)



LT9040H(Yellow) /LT9040E(Yellow-green)

Electro-optical Characteristics

(T<sub>a</sub> = 25°C)

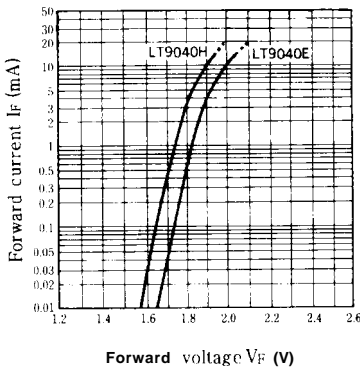
Parameter	Symbol	Model No.	conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>f</sub>	LT9040H	I <sub>f</sub> = 15mA	—	1.95	2.75	V
		LT9040E	I <sub>f</sub> = 15mA	—	2.05	2.75	
*5 Luminous intensity	I <sub>v</sub>	LT9040H	I <sub>f</sub> = 15mA	35.5	112	—	mcd
		LT9040E	I <sub>f</sub> = 15mA	60	126	—	
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>						MHz

\*1 Per chip

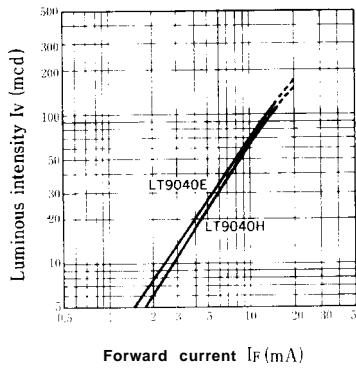
\*5 Per lamp : 8 chips, Tolerance : ± 30%

Characteristics Diagrams

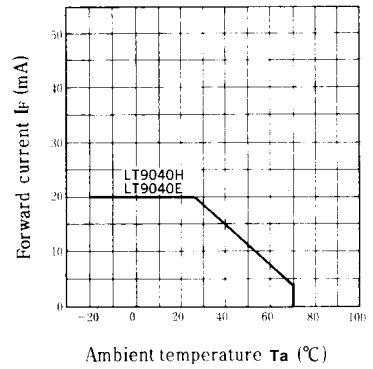
Forward Current vs. Forward Voltage (T<sub>a</sub> = 25°C)



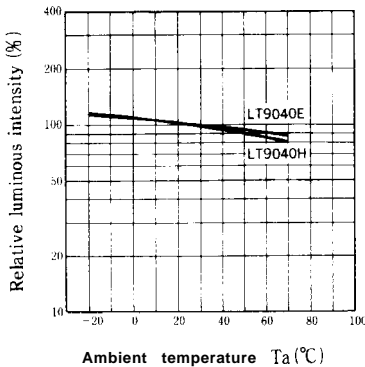
Luminous Intensity vs. Forward Current (T<sub>a</sub> = 25°C)



Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature (I<sub>f</sub> = 15mA)



Spectrum Distribution (T<sub>a</sub> = 25°C)

