

LT9210□ Series

Mold Built-in Reflector Type LED Panel Displays

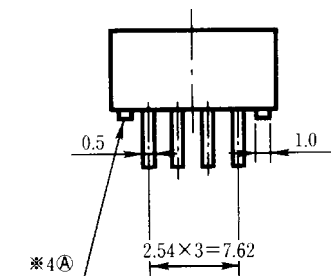
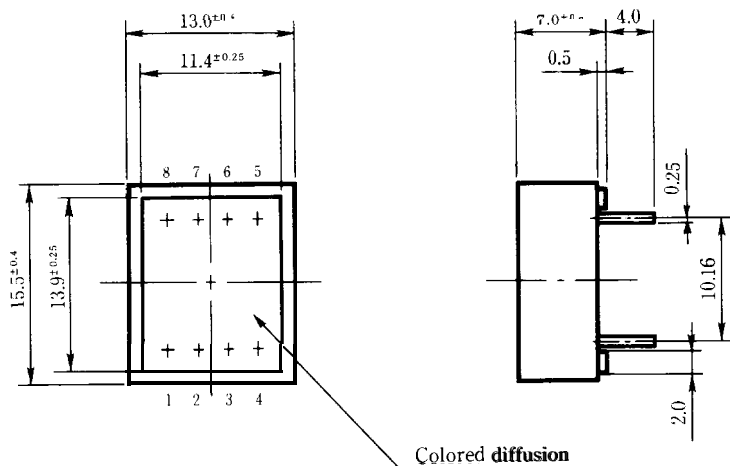
- Model No.
 - LT9210D Red GaAsP/GaP
 - LT9210H Yellow GaAsP/GaP
 - LT9210E Yellow-green GaP

■ Features

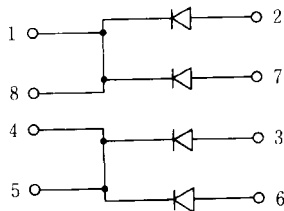
1. Radiation size $11.4 \times 13.9\text{mm}$
2. Mold built-in reflector type

■ Outline Dimensions

(Unit: mm)



Pin connections



LT9210U

■ Absolute Maximum Ratings ^{※1}

(Ta=25°C)

Parameter	Symbol	LT9210D	LT9210H				Unit	
		LT9210E						
※2 Power dissipation	P	336	200				mW	
Continuous forward current	I _F	30	20				mA	
※3 Peak forward current	I _{FM}	50	50				mA	
Derating factor	DC	—	0.55	0.36			mA/°C	
	Pulse	—	0.91	0.91			mA/°C	
Reverse voltage	V _R	5	5				v	
Operating temperature	T _{opr}	-20 to +70						°C
Storage temperature	T _{stg}	30 to +80						°C
※4 Soldering temperature	T _{sol}	260 (within 5 seconds)						°C

※1 Per chip

※2 Per lamp : 4 chips

※3 Duty ratio = 1/10, Pulse width = 0.1ms

※4 At the position of 1,6 mm from (A) level of outline dimensions

LT921 0D (Red)

■ Electro-optical Characteristics ※1

(Ta=25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	LT9210D	$I_F = 20\text{mA}$	—	2.0	2.8	“
※5 Luminous intensity	I_V	LT9210D	$I_F = 20\text{mA}$	20	40	—	mcd
Peak emission wavelength	λ_p	LT9210D	$I_F = 20\text{mA}$	—	635	—	nm
Spectrum radiation bandwidth	$\Delta\lambda$	LT9210D	$I_F = 20\text{mA}$	—	35	—	nm
Reverse current	I_R	LT9210D	$V_R = 4\text{V}$	—	—	10	μA
Response frequency	f_c	LT9210D	—	—	4	—	*HZ

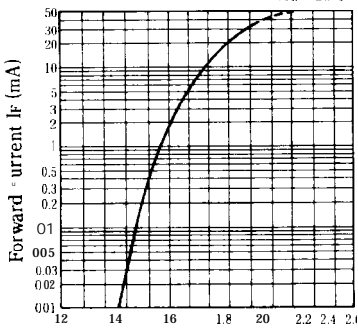
※1 Per chip

※5 Per lamp : 4 chips, Tolerance : ±30%

4

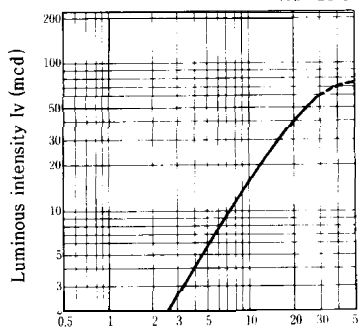
■ Characteristics Diagrams

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



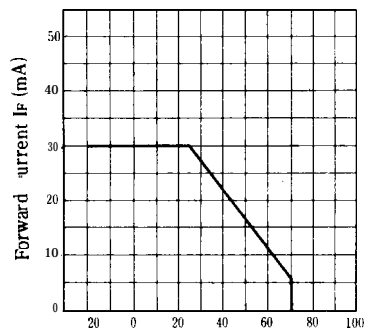
Forward voltage V_F (V)

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



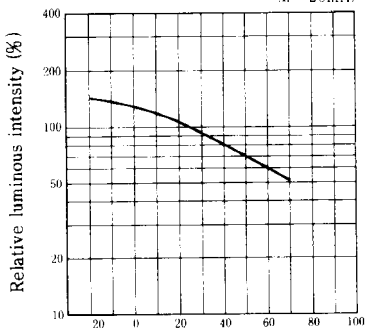
Forward current I_F (mA)

Forward Current Derating Curve



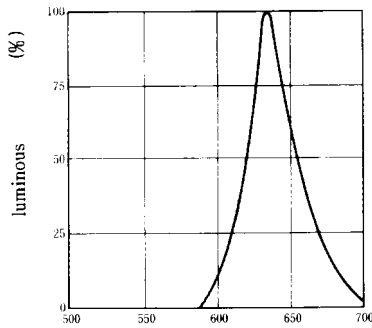
Ambient temperature T_a (°C)

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



Ambient temperature T_a (°C)

Spectrum Distribution (Ta = 25°C)



Wavelength λ (nm)

LT921 OH (Yellow) / **LT921 OE** (Yellow-green)

■ **Electro-optical** Characteristics *1

(Ta = 25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	LT921OH	I _F = 10mA	—	1.9	2.5	V
		LT921OE	I _F = 20mA	—	2.1	2.8	
*5 Luminous intensity	I _V	LT921OH	I _F = 10mA	3.0	9.0	—	mcd
		LT921OE	I _F = 20mA	22	45	—	
Peak emission wavelength	λ _p	LT921OH	I _F = 10mA	—	585	—	'm
		LT921OE	I _F = 20mA	—	565	—	
Spectrum radiation bandwidth	Δλ	LT921OH	I _F = 10mA	—	30	—	'm
		LT921OE	I _F = 20mA	—	30	—	
Reverse current	I _R	LT921OH	V _R = 4V	—	—	10	μA
		LT921OE	V _R = 4V	—	—	10	
Response frequency	f _c	LT921OH	—	—	4	—	'Hz
		LT921OE	—	—	4	—	

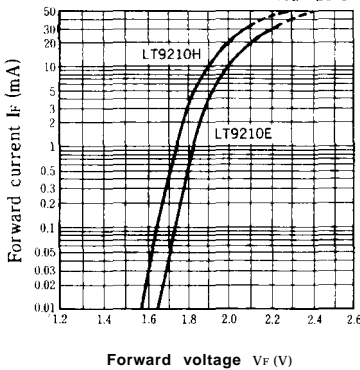
*1 Per chip

*5 Per lamp : 4 chips, Tolerance : ±30%

■ **Characteristics Diagrams**

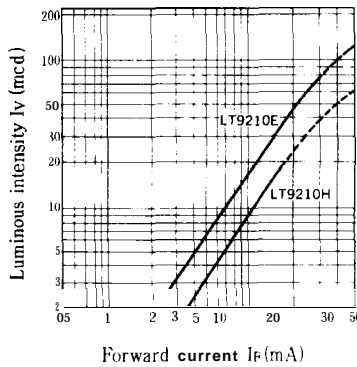
Forward Current vs. Forward Voltage

(Ta = 25°C)

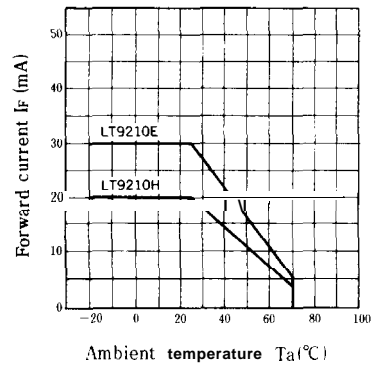


Luminous Intensity vs. Forward Current

(Ta = 25°C)

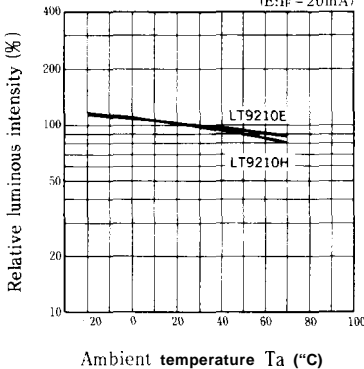


Forward Current **Derating** Curve



Relative Luminous Intensity vs. Ambient Temperature

(H: I_F = 10mA)
(E: I_F = 20mA)



Spectrum Distribution

(Ta = 25°C)

