

# LT9230 □ Series

## Mold Built-in Reflector Type LED Panel Displays

■ Model No.

LT9230D Red  
 LT9230H Yellow

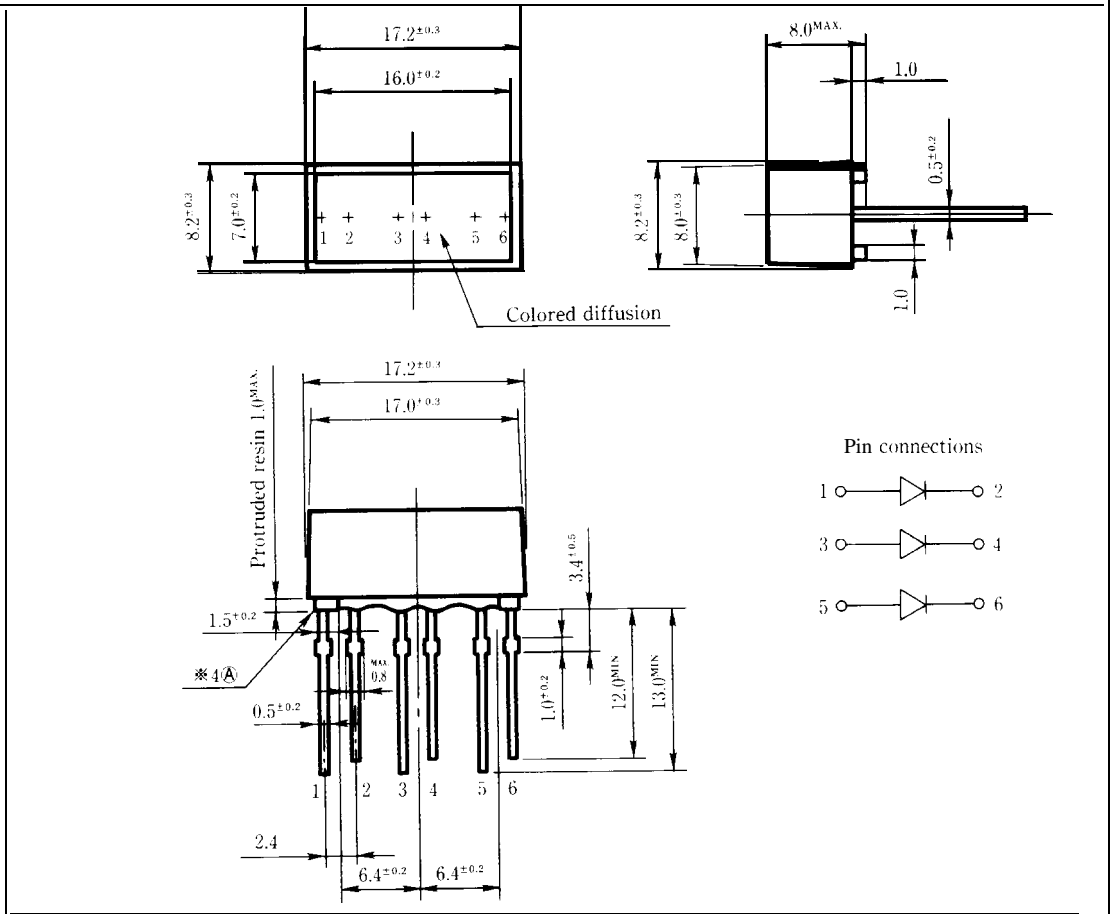
GaAsP/GaP  
 GaAsP/GaP

■ Features

1. Radiation size 7.0x 16.0mm
2. Mold built-in reflector type

■ Outline Dimensions

(Unit: mm)



SHARP

\*In the absence of confirmation by device specifications sheets, SHARP takes no responsibility for any defects that occur in equipment using any of SHARP's devices, shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest version of the device specifications sheets before using any SHARP's device.

## LT9230□

■ Absolute Maximum Ratings <sup>\*1</sup>

(Ta=25°C)

Parameter	Symbol	LT9230D	LT9230H				Unit
*2 Power dissipation	P	252	150				mW
Continuous forward current	I <sub>F</sub>	30	20				mA
*3 Peak forward current	I <sub>FM</sub>	50	50				mA
Derating factor	DC	-	0.55	0.36			mA/°C
	Pulse	-	0.91	0.91			mA/°C
Reverse voltage	V <sub>R</sub>	1 5	1 5	1			v
Operating temperature	T <sub>opr</sub>				-20 to +70		°C
Storage temperature	T <sub>stg</sub>				-30 to +80		°C
*4 Soldering temperature	T <sub>sol</sub>				260 (within 5 seconds)		°C

\*1 Per chip

\*2 Per lamp : 3 chips

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

\*4 At the position of 1.6 mm from (A) level of outline dimensions

LT9230D (Red) / LT9230H (Yellow)

■ Electro-optical Characteristics ※1

(Ta = 25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	LT9230D	I <sub>F</sub> = 20mA	—	2.0	2.8	V
		LT9230H	I <sub>F</sub> = 10mA		1.9	2.5	
※5 Luminous intensity	I <sub>v</sub>	LT9230D	I <sub>F</sub> = 20mA	10	25	—	'cd
		LT9230H	I <sub>F</sub> = 10mA	3.0	9.0	—	
Peak emission wavelength	λ <sub>p</sub>	LT9230D	I <sub>F</sub> = 20mA	—	635	—	'm
		LT9230H	I <sub>F</sub> = 10mA	—	585	—	
Spectrum radiation bandwidth	Δλ	LT9230D	I <sub>F</sub> = 20mA	—	35	—	'm
		LT9230H	I <sub>F</sub> = 10mA	—	30	—	
Reverse current	I <sub>R</sub>	LT9230D	V <sub>R</sub> = 4V	—	—	10	μA
		LT9230H	V <sub>R</sub> = 4V	—	—	10	
Response frequency	f <sub>c</sub>	LT9230D	—	—	4	—	MHz
		LT9230H	—	—	4	—	

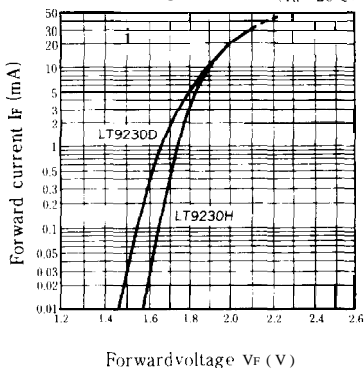
※1 Per chip

※5 Per lamp : 3 chips, Tolerance : ±30%

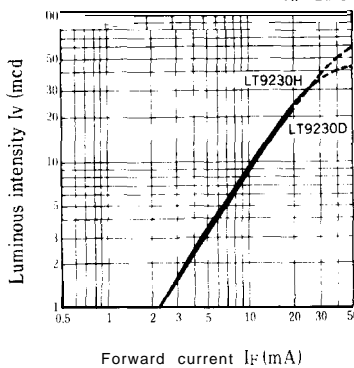
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■ Characteristics Diagrams

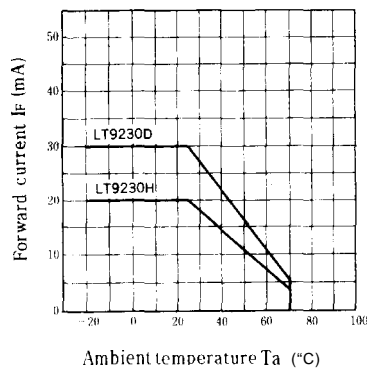
Forward Current vs. Forward Voltage (Ta = 25°C)



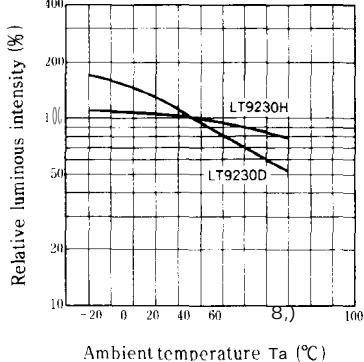
Luminous Intensity vs. Forward Current (Ta = 25°C)



Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature (D: I<sub>F</sub> = 20mA, H: I<sub>F</sub> = 10mA)



Spectrum Distribution (Ta = 25°C)

