

LT9525□ Series

φ 20mm Low Dome Type
LED Lamps

■ Model No.

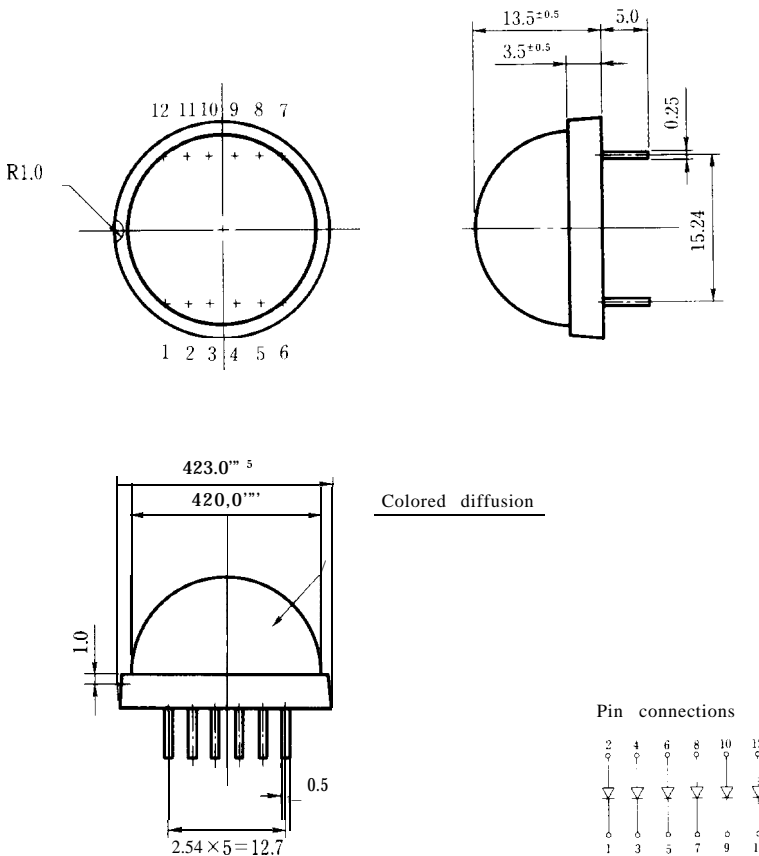
LT9525D Red	GaAsP/GaP
LT9525S Sunset orange	GaAsP/GaP
LT9525H Yellow	GaAsP/GaP
LT9525E Yellow-green	GaP

■ Features

1. φ 20mm all resin mold
2. Low dome type
3. Colored diffusion lens type

■ Outline Dimensions

(Unit: mm)



LT9525□

■ Absolute Maximum Ratings ^{※1}

(Ta = 25°C)

Parameter	Symbol	LT9525D	LT9525H				Unit	
		LT9525S						
		LT9525E						
※2 Power dissipation	P	1010	624				mW	
Continuous forward current	I _F	60	40				mA	
※3 Peak forward current	I _{FM}	100	100				mA	
Derating factor	DC	-	1.09	0.73			mA/°C	
	Pulse		1.82	1.82			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 6 chips

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

※4 At the position of 1.6mm from the bottom face of resin package

LT9525D (Red) / LT9525S (Sunset orange)

Electro-optical Characteristics ※1

(Ta = 25°C)

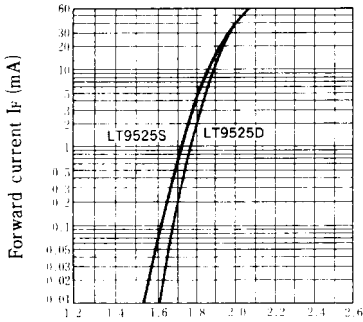
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	LT9525D	I _F = 40mA		2.0	2.8	V
		LT9525S	I _F = 40mA		2.0	2.8	
※2 Luminous intensity	I _v	LT9525D	I _F = 40mA	35	70	—	mcd
		LT9525S	I _F = 40mA	40	80	—	
Peak emission wavelength	λ _p	LT9525D	I _F = 40mA	—	635	—	‘m
		LT9525S	I _F = 40mA	—	610	—	
Spectrum radiation bandwidth	Δλ	LT9525D	I _F = 40mA	—	35	—	‘m
		LT9525S	I _F = 40mA	—	35	—	
Reverse current	I _R	LT9525D	V _R = 4V	—	—	10	μA
		LT9525S	V _R = 4V	—	—	10	
Terminal capacitance	C _t	LT9525D	V = 0V f = 1MHz	—	35	—	pF
		LT9525S	V = 0V f = 1MHz	—	30	—	
Response frequency	f _c	LT9525D	—	—	4	—	MHz
		LT9525S	—	—	4	—	

※1 Per chip

※2 Per lamp : 6 chips, Tolerance: ±30%

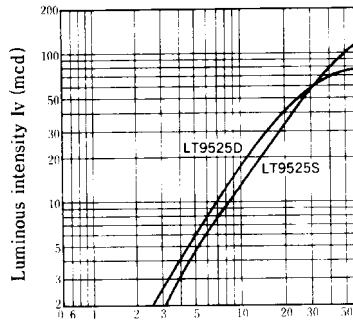
Characteristics Diagrams

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



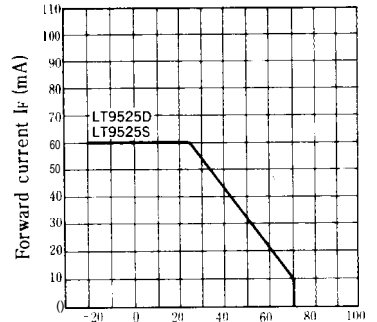
Forward voltage V_F(V)

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



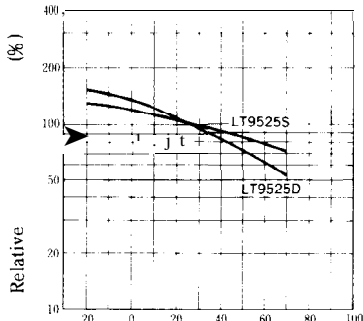
Forward current I_F (mA)

Forward Current Derating Curve



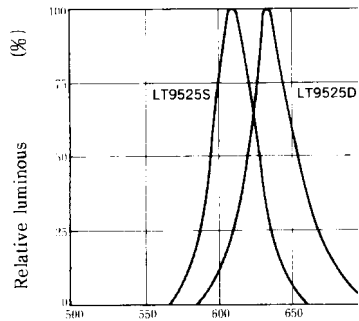
Ambient temperature Ta (°C)

Relative Luminous Intensity vs. Ambient Temperature (I_F = 40mA)



Ambient temperature Ta (°C)

Spectrum Distribution (Ta = 25°C)



Wavelength λ (nm)

LT9525H (Yellow) / LT9525E (Yellow-green)

■ Electro-optical Characteristics *1

(Ta=25°C)

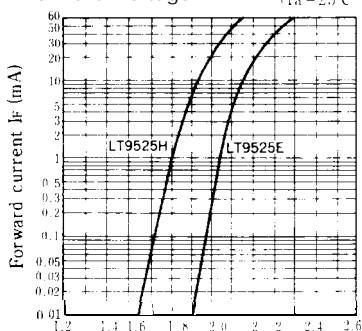
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	LT9525H	I _F = 20mA	—	1.9	2.6	V
		LT9525E	I _F = 40mA	—	2.2	2.8	
*2 Luminous intensity	I _V	LT9525H	I _F = 20mA	15	35	—	mcd
		LT9525E	I _F = 40mA	35	70	—	
Peak emission wavelength	λ _p	LT9525H	I _F = 20mA	—	585	—	‘m
		LT9525E	I _F = 40mA	—	565	—	
Spectrum radiation bandwidth	Δλ	LT9525H	I _F = 20mA	—	30	—	‘m
		LT9525E	I _F = 40mA	—	30	—	
Reverse current	I _R	LT9525H	V _R = 4V	—	—	10	μA
		LT9525E	V _R = 4V	—	—	10	
Terminal capacitance	C _t	LT9525H	V=0V f=1 MHz	—	30	—	pF
		LT9525E	V=0V f=1 MHz	—	70	—	
Response frequency	f _c	LT9525H	—	—	4	—	‘Hz
		LT9525E	—	—	4	—	

*1 Per chip

*2 Per lamp: 6 chips, Tolerance: ±30%

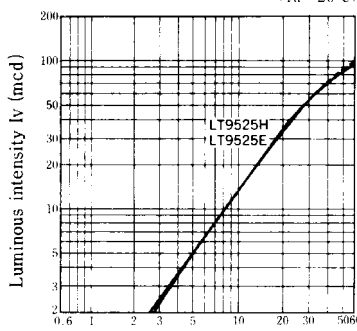
■ Characteristics Diagrams

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



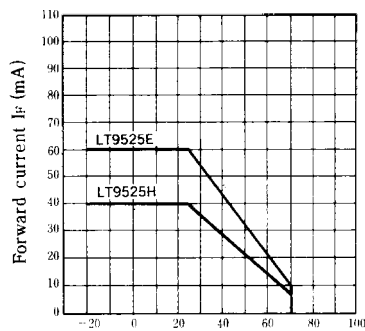
Forward voltage V_F (V)

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



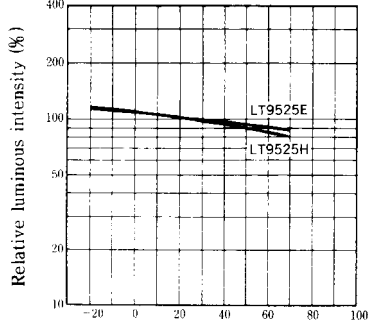
Forward current I_F (mA)

Forward Current Derating Curve



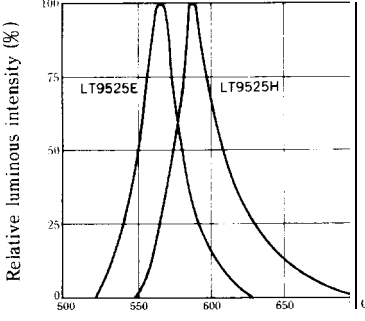
Ambient temperature T_a (°C)

Relative Luminous Intensity vs. Ambient Temperature (I_F = 20mA / I_F = 40mA)



Ambient temperature T_a (°C)

Spectrum Distribution (Ta = 25°C)



Wavelength λ (nm)