

PACKAGE DIMENSION	INTERNAL CIRCUIT DIAGRAM
<p>NOTE: All Dimension Are In Millimeters And (Inch) Tolerance Is $\pm 0.25(0.01)$" Unless Otherwise Noted</p>	

• Connection To Electrical Schematic

<i>Electrical Connection</i>			
LFD521X-XX/SP10		LFD522X-XX/SP10	
PIN NO.		PIN NO.	
1	Anode E	1	Cathode E
2	Anode D	2	Cathode D
3	Anode DP	3	Cathode DP
4	Anode C	4	Cathode C
5	Anode G	5	Cathode G
6	Common Cathode Dig.4	6	Common Anode Dig.4
7	Anode B	7	Cathode B
8	Common Cathode Dig.3	8	Common Anode Dig.3
9	Common Cathode Dig.2	9	Common Anode Dig.2
10	Anode F	10	Cathode F
11	Anode A	11	Cathode A
12	Common Cathode Dig.1	12	Common Anode Dig.1

• Part Selection And Application Information (Ratings At 25°C Ambient)

PART NO	CHIP		common cathode or anode	λ_P (nm)	$\Delta\lambda$ (nm)	Electrical					IV-M
	material	emitted				Vf(v)			Iv(mcd)		
						Min	Typ.	Max	Min	Typ.	
LFD5515-XX/SP10	GaAlAs	Red	Common Cathode	660	20	1.5	1.7	2.4	2.2	3.6	2:1
LFD5511-XX/SP10	GaP	Red		697	90	1.7	2.1	2.8	0.6	1.0	2:1
LFD5512-XX/SP10	GaP	Green		565	30	1.7	2.1	2.8	1.7	2.8	2:1
LFD5513-XX/SP10	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.6	2.6	2:1
LFD5514-XX/SP10	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.7	2.8	2:1
LFD5525-XX/SP10	GaAlAs	Red	Common Anode	660	20	1.5	1.7	2.4	2.2	3.6	2:1
LFD5521-XX/SP10	GaP	Red		697	90	1.7	2.1	2.8	0.6	1.0	2:1
LFD5522-XX/SP10	GaP	Green		565	30	1.7	2.1	2.8	1.7	2.8	2:1
LFD5523-XX/SP10	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.6	2.6	2:1
LFD5524-XX/SP10	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.7	2.8	2:1

• Absolute Maximum Rating (Ta=25°C)

Parameter	Red		Green	Yellow		Orange	Unit	Remark
Forward Current Per Chip	<i>SR</i>	<i>H</i>	<i>G</i>	<i>Y</i>		<i>E</i>		
	40	15	30	20		30	mA	
Peak Current Per Chip (Duty 1/10, 0.1MS Pulse Width)	200	60	120	80		120	mA	
Power Dissipation Per Chip	110	45	100	85		100	mW	
Derating Linear From 25°C Per Chip	0.45	0.25	0.45	0.45		0.45	mA/°C	
Reverse Current Per Any Chip	10		10	10		10	μA	
Operating Temperature	-25°C TO +85°C							
Storage Temperature	-25°C TO +85°C							

Solder Temperature 1/16 Inch Below Seating Plane For 3 Seconds At 260°C

• Test Condition For Each Parameter

Parameter	Symbol	Unit	Test Condition
Forward Voltage Per Chip	V _f	volt	I _f =20mA
Luminous Intensity Per Chip	I _v	mcd	I _f =10mA
Peak Emission Wavelength	λ_P	nm	I _f =20mA
Spectral Line Half-Width	$\Delta\lambda$	nm	I _f =20mA
Reverse Current Any Chip	I _r	μA	V _r =5V
Luminous Intensity Matching Ratio	IV-M		