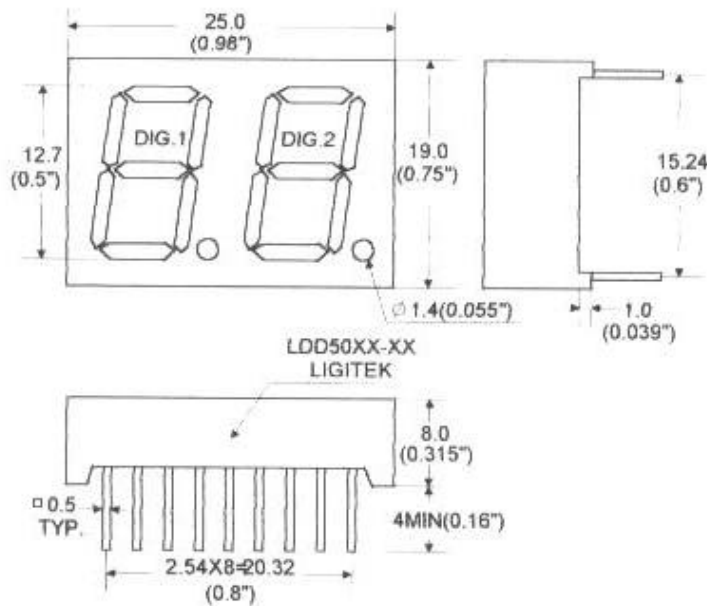
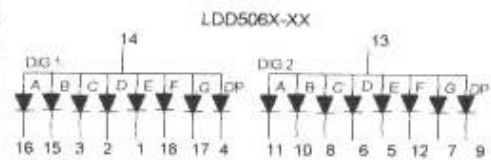
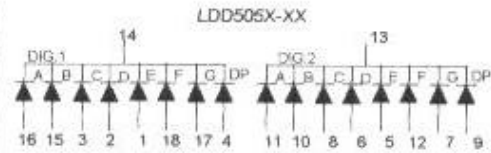


### PACKAGE DIMENSION



### INTERNAL CIRCUIT DIAGRAM



NOTE: All Dimension Are In Millimeters And (Inch)  
Tolerance Is +0.25(0.01") Unless Otherwise Noted

### • Connection To Electrical Schematic

#### Electrical Connection

PIN NO.	LDD505X-XX	PIN NO.	LDD506X-XX
1	Anode E Dig.1	1	Cathode E Dig.1
2	Anode D Dig.1	2	Cathode D Dig.1
3	Anode C Dig.1	3	Cathode C Dig.1
4	Anode DP Dig.1	4	Cathode DP Dig.1
5	Anode E Dig.2	5	Cathode E Dig.2
6	Anode D Dig.2	6	Cathode D Dig.2
7	Anode G Dig.2	7	Cathode G Dig.2
8	Anode C Dig.2	8	Cathode C Dig.2
9	Anode DP Dig.2	9	Cathode DP Dig.2
10	Anode B Dig.2	10	Cathode B Dig.2
11	Anode A Dig.2	11	Cathode A Dig.2
12	Anode F Dig.2	12	Cathode F Dig.2
13	Common Cathode Dig.2	13	Common Anode Dig.2
14	Common Cathode Dig.1	14	Common Anode Dig.1
15	Anode B Dig.1	15	Cathode B Dig.1
16	Anode A Dig.1	16	Cathode A Dig.1
17	Anode G Dig.1	17	Cathode G Dig.1
18	Anode F Dig.1	18	Cathode F Dig.1

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

PART NO	CHIP		common cathode or anode	$\lambda_P$ (nm)	$\Delta\lambda$ (nm)	Electrical					IV-M
						Vf(v)			Iv(mcd)		
	material	emitted				Min	Typ.	Max	Min	Typ.	
LDD5055-XX	GaAlAs	Red	Common Cathode	660	20	1.5	1.7	2.4	3.5	6.0	2:1
LDD5051-XX	GaP	Red		697	90	1.7	2.1	2.8	0.5	0.8	2:1
LDD5052-XX	GaP	Green		565	30	1.7	2.1	2.8	1.8	3.0	2:1
LDD5053-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.3	2.2	2:1
LDD5054-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	2.5	4.0	2:1
LDD5065-XX	GaAlAs	Red	Common Anode	660	20	1.5	1.7	2.4	3.5	6.0	2:1
LDD5061-XX	GaP	Red		697	90	1.7	2.1	2.8	0.5	0.8	2:1
LDD5062-XX	GaP	Green		565	30	1.7	2.1	2.8	1.8	3.0	2:1
LDD5063-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.3	2.2	2:1
LDD5064-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	2.5	4.0	2:1

• Absolute Maximum Rating (Ta=25°C)

Parameter	Red		Green		Yellow		Orange		Unit	Remark
	SR	H	G	Y	E					
Forward Current Per Chip	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 <sub>f</sub>	volt	I <sub>f</sub> =20mA
Luminous Intensity Per Chip	I <sub>v</sub>	mcd	I <sub>f</sub> =10mA
Peak Emission Wavelength	$\lambda_P$	nm	I <sub>f</sub> =20mA
Spectral Line Half-Width	$\Delta\lambda$	nm	I <sub>f</sub> =20mA
Reverse Current Any Chip	I <sub>r</sub>	μA	V <sub>r</sub> =5V
Luminous Intensity Matching Ratio	IV-M		