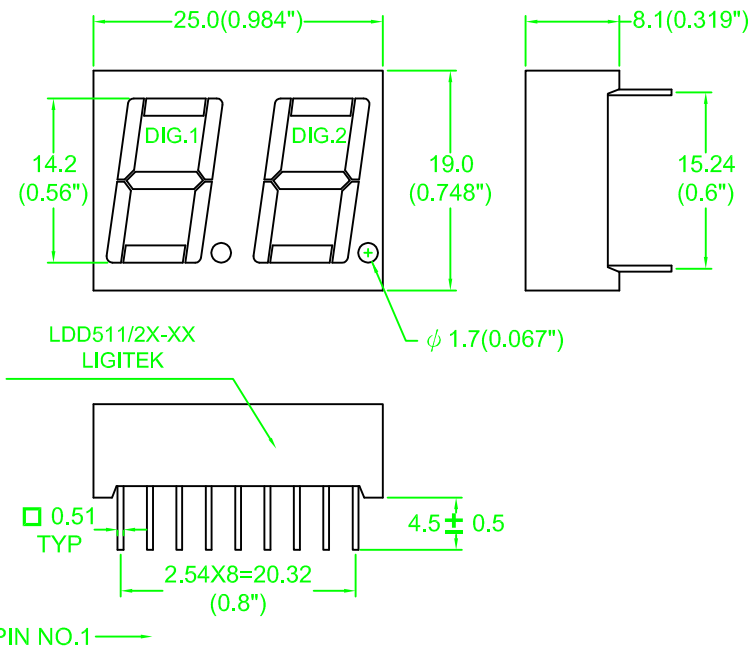


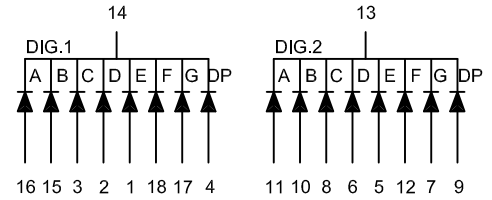


PACKAGE DIMENSION

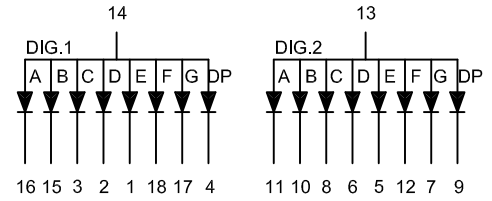
INTERNAL CIRCUIT DIAGRAM



LDD511X-XX



LDD512X-XX



NOTE:1.All Dimension Are In Millimeters And (Inch)
Tolerance Is ±0.25(0.01") unless Otherwise Noted
2.Specifications are subject to change without notice.

▪ Connection To Electrical Schematic

Electrical connection

PIN NO.	LDD511X-XX	PIN NO.	LDD512X-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	λ_p (nm)	$\Delta \lambda$ (nm)	Electrial					IV-M
	material	emitted				Vf(v)			Iv(mcd)		
						Min	Typ	Max	Min	Typ	
LDD5115-XX	GaAlAs	Red	Common Cathode	660	20	1.5	1.7	2.4	3.05	6.1	2:1
LDD5111-XX	GaP	Red		697	90	1.7	2.1	2.8	0.2	0.5	2:1
LDD5112-XX	GaP	Green		565	30	1.7	2.1	2.8	4.0	6.1	2:1
LDD5113-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.75	3.05	2:1
LDD5114-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.75	3.05	2:1
LDD5125-XX	GaAlAs	Red	Common Anode	660	20	1.5	1.7	2.4	3.05	6.1	2:1
LDD5121-XX	GaP	Red		697	90	1.7	2.1	2.8	0.2	0.5	2:1
LDD5122-XX	GaP	Green		565	30	1.7	2.1	2.8	4.0	6.1	2:1
LDD5123-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.75	3.05	2:1
LDD5124-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.75	3.05	2:1

▪ Absoul Maximum Rating (Ta=25°C)

Parameter	Red		Green	Yellow		Orange	Unit	Remark
Forward Current Per Chip	SR	H	G	Y	E			
	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	Vf	volt	If=20mA
Luminous Intensity Per Chip	Iv	mcd	If=10mA
Peak Emission Wavelength	λ_p	nm	If=20mA
Spectral Line Half-Width	$\Delta \lambda$	nm	If=20mA
Reverse Current Any Chip	Ir	μA	Vr=5V
Luminous Intensity Matching Ratio	IV-M		