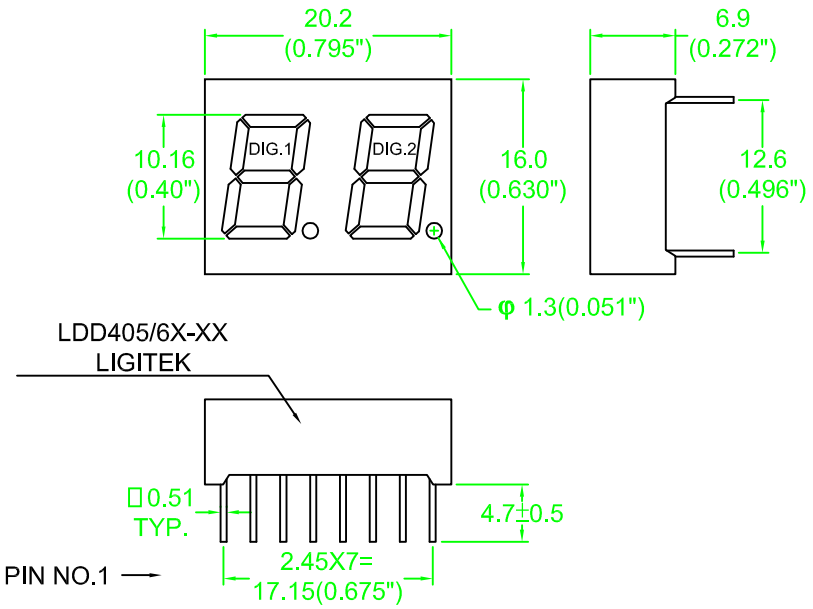
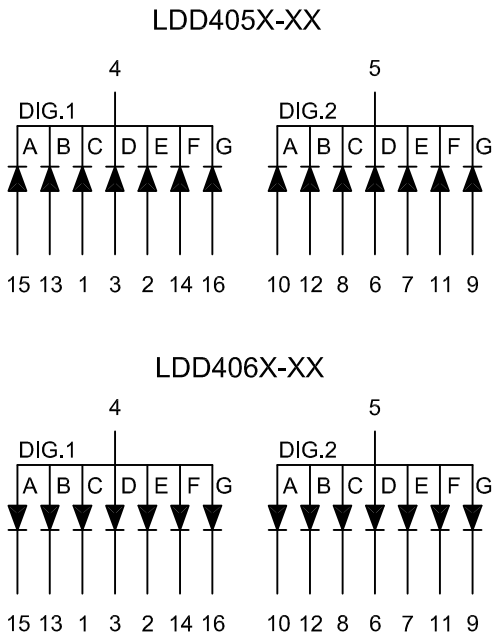
LIGITEK

PACKAGE DIMENSION



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.

INTERNAL CIRCUIT DIAGRAM



▪ Connection To Electrical Schematic

Electrical connection

PIN NO.	LDD405X-XX	PIN NO.	LDD406X-XX
1	Anode C Dig.1	1	Cathode C Dig.1
2	Anode E Dig.1	2	Cathode E Dig.1
3	Anode D Dig.1	3	Cathode D Dig.1
4	Common Cathode Dig.1	4	Common Anode Dig.1
5	Common Cathode Dig.2	5	Common Anode Dig.2
6	Anode D Dig.2	6	Cathode D Dig.2
7	Anode E Dig.2	7	Cathode E Dig.2
8	Anode C Dig.2	8	Cathode C Dig.2
9	Anode G Dig.2	9	Cathode G Dig.2
10	Anode A Dig.2	10	Cathode A Dig.2
11	Anode F Dig.2	11	Cathode F Dig.2
12	Anode B Dig.2	12	Cathode B Dig.2
13	Anode B Dig.1	13	Cathode B Dig.1
14	Anode F Dig.1	14	Cathode F Dig.1
15	Anode A Dig.1	15	Cathode A Dig.1
16	Anode G Dig.1	16	Cathode G Dig.1

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

PART NO	CHIP		common cathode or anode	λp (nm) *=λD	△λ (nm)	Electrial					IV-M
						Vf(v)			Iv(mcd)		
	material	*emitted*				*Min*	Typ	*Max*	*Min*	Typ	
LDD4055-XX	GaAlAs	Red	Common Cathode	660	20	1.5	1.7	2.4	3.05	5.0	2:1
LDD4051-XX	GaP	Red		697	90	1.7	2.1	2.8	0.2	0.35	2:1
LDD4052-XX	GaP	Green		565	30	1.7	2.1	2.8	1.75	3.05	2:1
LDD4053-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.75	3.05	2:1
LDD4054-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.75	3.05	2:1
LDD405SBKS-XX	InGaN/SiC	Blue		*475	26	1.7	3.5	4.2	7.2	12.8	2:1
LDD4065-XX	GaAlAs	Red	Common Anode	660	20	1.5	1.7	2.4	3.05	5.0	2:1
LDD4061-XX	GaP	Red		697	90	1.7	2.1	2.8	0.2	0.35	2:1
LDD4062-XX	GaP	Green		565	30	1.7	2.1	2.8	1.75	3.05	2:1
LDD4063-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.75	3.05	2:1
LDD4064-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.75	3.05	2:1
LDD406SBKS-XX	InGaN/SiC	Blue		*475	26	1.7	3.5	4.2	7.2	12.8	2:1

• Absoult Maximum Rating (Ta=25℃)

Parameter	Red			Green		Blue	Yellow		Orange		Unit	Remark
Forward Current Per Chip	SR		H	VG	G	SBKS	Y			E		
	40		15	30	30	30	20			30	mA	
Peak Current Per Chip (Duty 1/10,0.1mS Pulse Width)	200		60	120	120	100	80			120	mA	
Power Dissipation Per Chip	110		45	100		120	85		100		mW	
Derating Linear From 25℃ Per Chip	0.45		0.25	0.45			0.45		0.45		mA/℃	
Reverse Current Per Any Chip	10			10		50	10		10		μA	
Operating Temperature	-25℃ TO +85℃											
Storage Temperature	-25℃ TO +85℃											

Solder Temperature 1-16 Inch Below Seating Plane For 3 Seconds At 260 ℃

• 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	λp	nm	If=20mA
Spectral Line Half-Width	△λ	nm	If=20mA
Reverse Current Any Chip	Ir	μA	Vr=5V
Luminous Intensity Matching Ratio	IV-M		