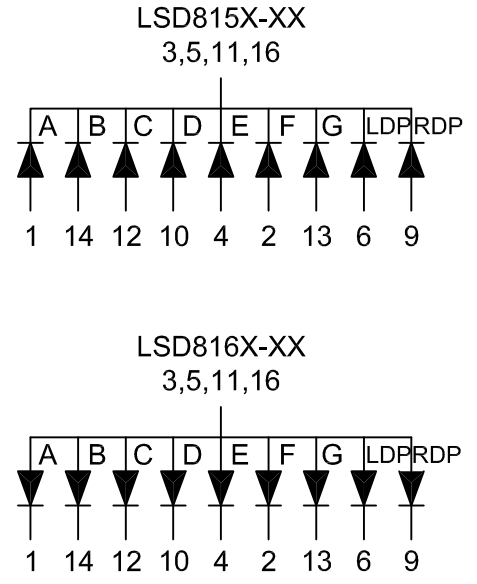
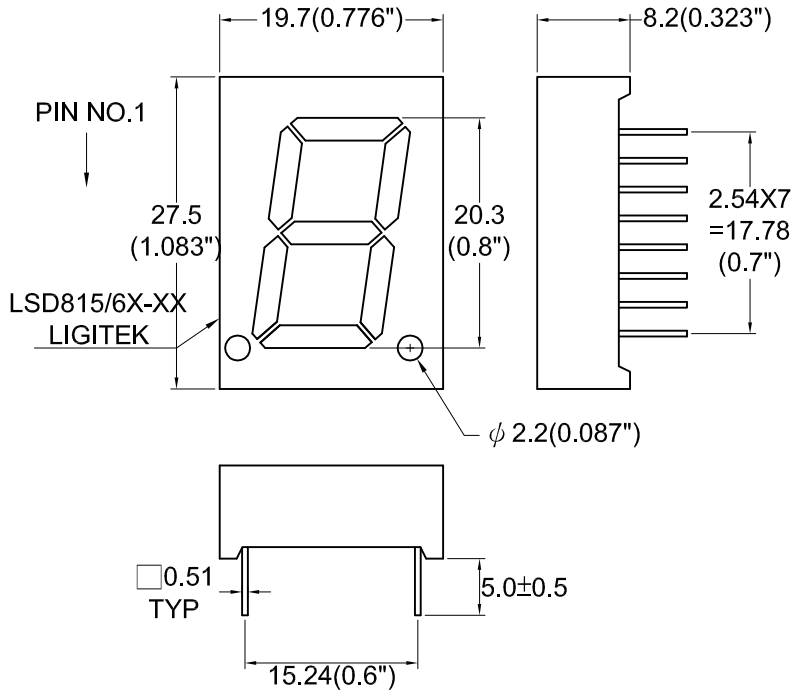




PACKAGE DIMENSION

INTERNAL CIRCUIT DIAGRAM



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

• Connection To Electrical Schematic

Electrical connection

PIN NO.	LSD815X-XX	PIN NO.	LSD816X-XX
1	Anode A	1	Cathode A
2	Anode F	2	Cathode F
3	Common Cathode	3	Common Anode
4	Anode E	4	Cathode E
5	Common Cathode	5	Common Anode
6	Anode LDP	6	Cathode LDP
7	No Pin	7	No Pin
8	No Pin	8	No Pin
9	Anode RDP	9	Cathode RDP
10	Anode D	10	Cathode D
11	Common Cathode	11	Common Anode
12	Anode C	12	Cathode C
13	Anode G	13	Cathode G
14	Anode B	14	Cathode B
15	No Pin	15	No Pin
16	Common Cathode	16	Common Anode

## • 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
	material	emitted				Vf(v)			Iv(mcd)		
						Min.	Typ.	Max.	Min.	Typ.	
LSD8155-XX	GaAIAs	Red	Common Cathode	660	20	1.5	1.7	2.4	6.1	10.5	2:1
LSD8151-XX	GaP	Red		697	90	1.7	2.1	2.8	0.5	1.0	2:1
LSD8152-XX	GaP	Green		565	30	1.7	2.1	2.8	2.35	4.0	2:1
LSD8153-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.35	2.35	2:1
LSD8154-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.75	3.05	2:1
LSD8156-XX	GaAIAs	Red		660	20	1.5	1.7	2.4	7.2	12.8	2:1
LSD8165-XX	GaAIAs	Red	Common Anode	660	20	1.5	1.7	2.4	6.1	10.5	2:1
LSD8161-XX	GaP	Red		697	90	1.7	2.1	2.8	0.5	1.0	2:1
LSD8162-XX	GaP	Green		565	30	1.7	2.1	2.8	2.35	4.0	2:1
LSD8163-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.35	2.35	2:1
LSD8164-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.75	3.05	2:1
LSD8166-XX	GaAIAs	Red		660	20	1.5	1.7	2.4	7.2	12.8	2:1

## • Absolute Maximum Rating (Ta=25°C)

Parameter	Red			Green	Yellow			Orange	Unit	Remark
Forward Current Per Chip	SR	HR	H	G	Y		E			
		40	40	15	30	20		30	<b>mA</b>	
Peak Current Per Chip (Duty 1/10,0.1ms Pulse Width)	200	200	60	120	80		120	<b>mA</b>		
Power Dissipation Per Chip	110		45	100	85		100	<b>mW</b>		
Derating Linear From 25°C Per Chip	0.45		0.25	0.45	0.45		0.45	<b>mA/°C</b>		
Reverse Current Per Any Chip	10		10	10	10		10	<b>μA</b>		
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	$\lambda_p$	nm	If=20mA
Spectral Line Half-Width	$\Delta\lambda$	nm	If=20mA
Reverse Current Any Chip	Ir	<b>μA</b>	Vr=5V
Luminous Intensity Matching Ratio	IV-M		