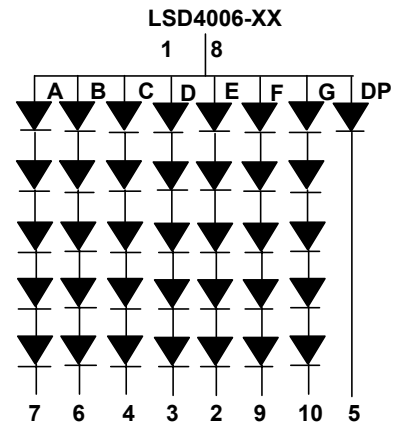
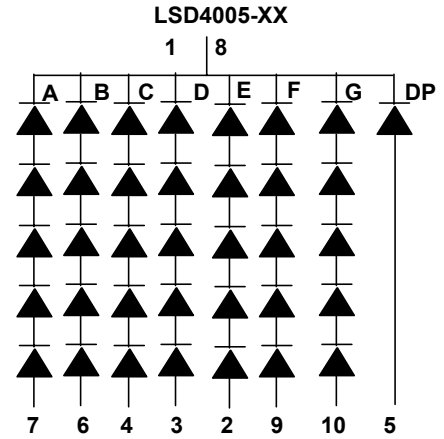
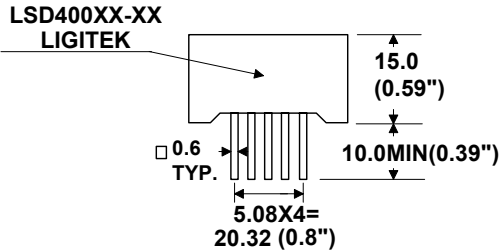
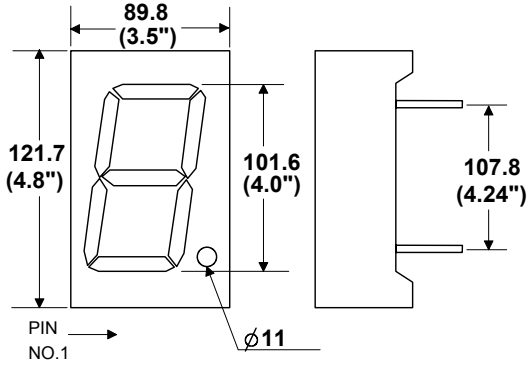


SINGLE DIGIT LED DISPLAY (4.0 inch)

LSD4005X/6X series

Package Dimensions

Internal Circuit Diagram



NOTE: all dimension are in millimeters and (inch)
tolerance is $\pm 0.25(0.01)$ unless otherwise noted

• **connection to electrical schematic**

electrical connection

PIN NO.	LSD4005X-XX	PIN NO.	LSD4006X-XX
1	Common Cathode	1	Common Anode
2	Anode E	2	Cathode E
3	Anode D	3	Cathode D
4	Anode C	4	Cathode C
5	Anode DP	5	Cathode DP
6	Anode B	6	Cathode B
7	Anode A	7	Cathode A
8	Common Cathode	8	Common Anode
9	Anode F	9	Cathode F
10	Anode G	10	Cathode G

Specifications may be subject to change without notice

• Part selection and Electro-optical characteristics (ratings@Ta=25°C)

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	
LSD40056-XX	GaAlAs	Super Red	Common Cathode	660	20	7.5	8.5	12	26	45	2:1
LSD40055-XX	GaAlAs	Super Red		660	20	7.5	8.5	12	12.8	23	2:1
LSD40051-XX	GaP	Red		697	90	8.5	10.5	14	5	9	2:1
LSD40052-XX	GaP	Green		565	30	1.7	2.1	14	11	18	2:1
LSD40053-XX	GaAsP/GaP	Yellow		585	35	1.7	2	14	10	17	2:1
LSD40054-XX	GaAsP/GaP	Hi-Eff Red		635	45	1.7	2	14	11	18	2:1
LSD40066-XX	GaAlAs	Super Red	Common Anode	660	20	7.5	8.5	12	26	45	2:1
LSD40065-XX	GaAlAs	Super Red		660	20	1.5	1.7	12	14	23	2:1
LSD40061-XX	GaP	Red		697	90	1.7	2.1	14	5.4	9	2:1
LSD40062-XX	GaP	Green		565	30	1.7	2.1	14	11	18	2:1
LSD40063-XX	GaAsP/GaP	Yellow		585	35	1.7	2	14	10	17	2:1
LSD40064-XX	GaAsP/GaP	Hi-Eff Red		635	45	1.7	2	14	11	18	2:1

• ABSOLUTE MAXIMUM RATINGS (TA=25°C)

PARAMETER	RED			GREEN		YELLOW		HI-EFF RED		UNIT	REMARK
	SR	HR	H	G		Y		I			
Forward current per chip	40	40	15	30		20		30		mA	
Peak current per chip (Duty 1/10, 0.1MS Pulse width)	200	200	60	120		80		120		mA	
Power dissipation per chip	110		45	100		85		100		mW	
De-rating linear from 25°C / chip	0.45		0.2	0.45		0.45		0.45		mA/°C	
Reverse current per chip	10			10	10	10	10	10	10	μA	
Operating Temperature	-25°C TO +85°C										
Storage Temperature	-25°C TO +85°C										

Solder Temperature 1/16" below seating plane for 3 seconds @ 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	uA	V _r =5V
LUMINOUS INTENSITY MATCHING RATIO	IV-M		

Specifications may be subject to change without notice

09/03