



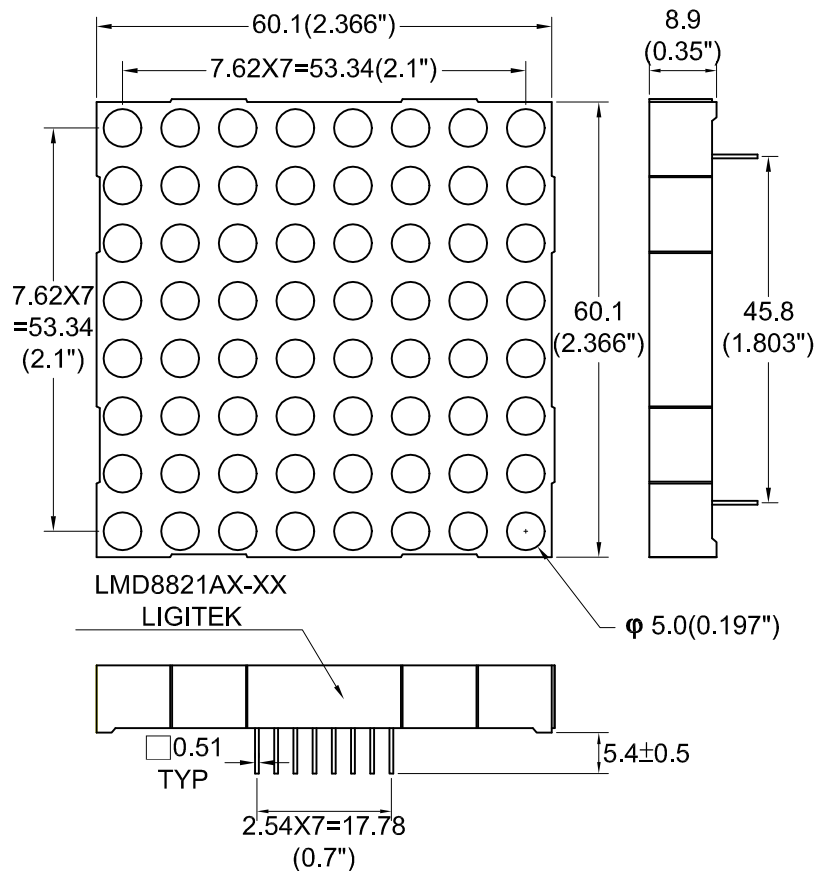
LIGITEK

DOT MATRIX DIGIT LED DISPLAY (2.3Inch)

LMD8821AX

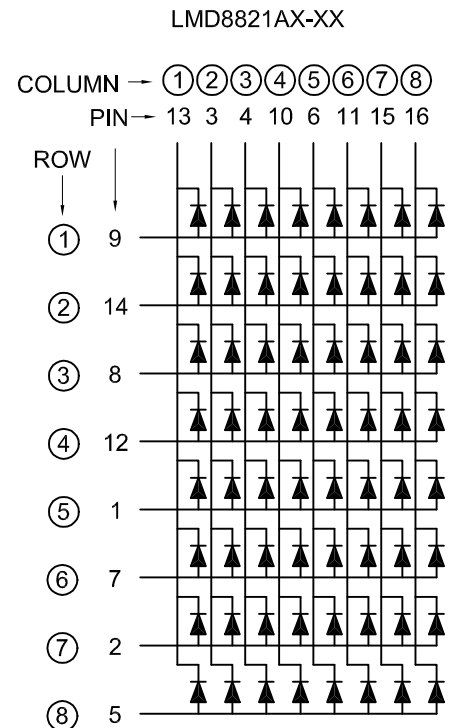
SERIES Page 1/3

PACKAGE DIMENSION



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

INTERNAL CIRCUIT DIAGRAM

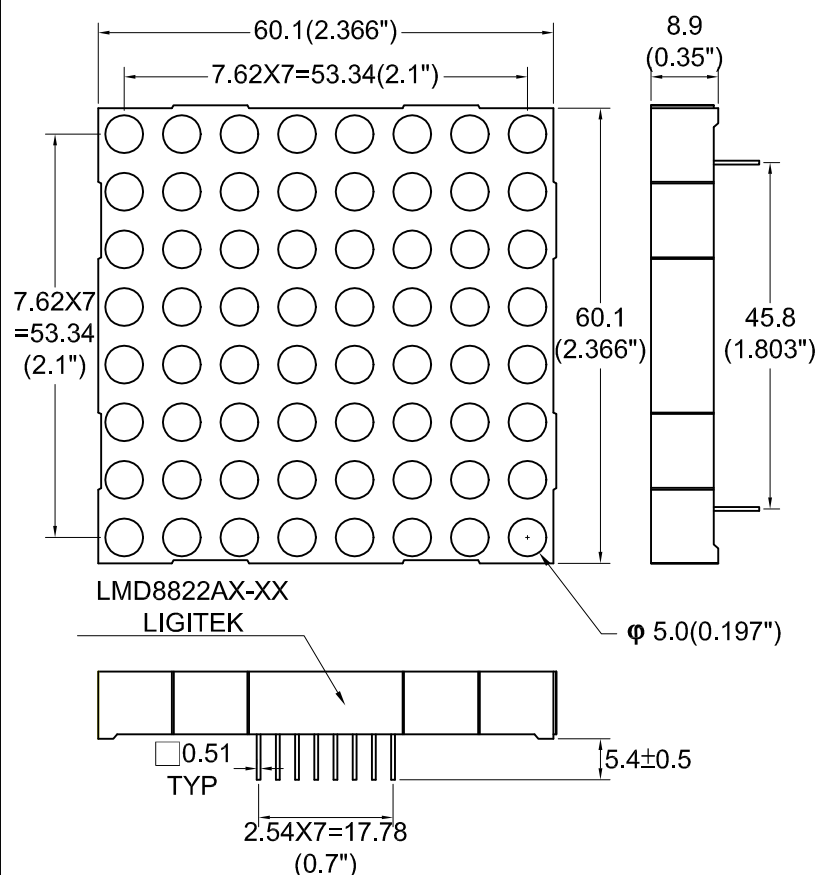


▪ Connection To Electrical Schematic

Electrical connection

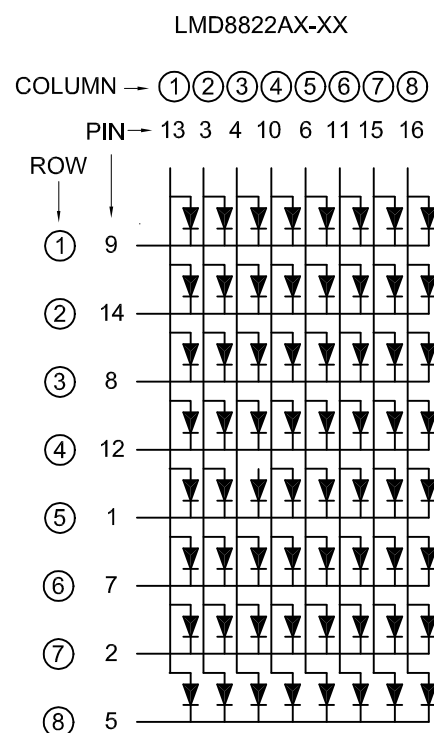
PIN NO.	LMD8821AX-XX	PIN NO.	
1	Anode Row 5	13	Cathode Column 1
2	Anode Row 7	14	Anode Row 2
3	Cathode Column 2	15	Cathode Column 7
4	Cathode Column 3	16	Cathode Column 8
5	Anode Row 8		
6	Cathode Column 5		
7	Anode Row 6		
8	Anode Row 3		
9	Anode Row 1		
10	Cathode Column 4		
11	Cathode Column 6		
12	Anode Row 4		

PACKAGE DIMENSION



NOTE:1.All dimension are in millimeters and (Inch)
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INTERNAL CIRCUIT DIAGRAM



▪ Connection To Electrical Schematic

Electrical connection

PIN NO.	LMD8822AX-XX	PIN NO.	
1	Cathode Row 5	14	Cathode Row 2
2	Cathode Row 7	15	Anode Column 7
3	Anode Column 2	16	Anode Column 8
4	Anode Column 3		
5	Cathode Row 8		
6	Anode Column 5		
7	Cathode Row 6		
8	Cathode Row 3		
9	Cathode Row 1		
10	Anode Column 4		
11	Anode Column 6		
12	Cathode Row 4		
13	Anode Column 1		

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

PART NO	CHIP		common cathode or anode	λ P (nm)	λ D (nm)	$\Delta \lambda$ (nm)	Electrial					IV-M
							Vf(v)			Iv(mcd)		
	material	emitted					Min	Typ	Max	Min	Typ	
LMD8821AE-XX	GaAsP/GaP	Orange	Column Cathode Row Anode	635	---	45	1.7	2.0	2.8	3.05	5.0	2:1
LMD8821ASR-XX	GaAlAs	Red		660	---	20	1.5	1.7	2.4	6.1	12	2:1
LMD8821AHR-XX	GaAlAs	Red		660	---	20	1.5	1.7	2.4	10.5	20	2:1
LMD8821AG-XX	GaP	Green		565	---	30	1.7	2.1	2.8	3.05	6.1	2:1
LMD8821HYS-XX	AlGaInP	Yellow		----	587	15	1.7	2.0	2.8	18	31	2:1
LMD8822AE-XX	GaAsP/GaP	Orange	Column Anode Row Cathode	635	---	45	1.7	2.0	2.8	3.05	5.0	2:1
LMD8822ASR-XX	GaAlAs	Red		660	---	20	1.5	1.7	2.4	6.1	12	2:1
LMD8822AHR-XX	GaAlAs	Red		660	---	20	1.5	1.7	2.4	10.5	20	2:1
LMD8822AG-XX	GaP	Green		565	---	30	1.7	2.1	2.8	3.05	6.1	2:1
LMD8822HYS-XX	AlGaInP	Yellow		----	587	15	1.7	2.0	2.8	18	31	2:1

▪ Absoul Maximum Rating (Ta=25 °C)

Parameter	Red			Green		Yellow			Orange		Unit	Remark
Forward Current Per Chip	SR	HR		G				HYS		E		
	40	40		30				30		30	mA	
Peak Current Per Chip (Duty 1/10,0.1mS Pulse Width)	200	200		120				200		120	mA	
Power Dissipation Per Chip	110			100		85			100		mW	
Derating Linear From 25°C Per Chip	0.45			0.45		0.45			0.45		mA/°C	
Reverse Current Per Any Chip	10			10		10			10		μ A	
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	λP	nm	If=20mA
Dominant Wavelength	λD	nm	If=20mA
Spectral Line Half-Width	$\Delta \lambda$	nm	If=20mA
Reverse Current Any Chip	Ir	μ A	Vr=5V
Luminous Intensity Matching Ratio	IV-M		