



0.5" NUMERIC LED DISPLAY

LA(C)50X1-11 / LA(C)50X2-11 / LD(E)50X2-11 / LN50X3-12

Features

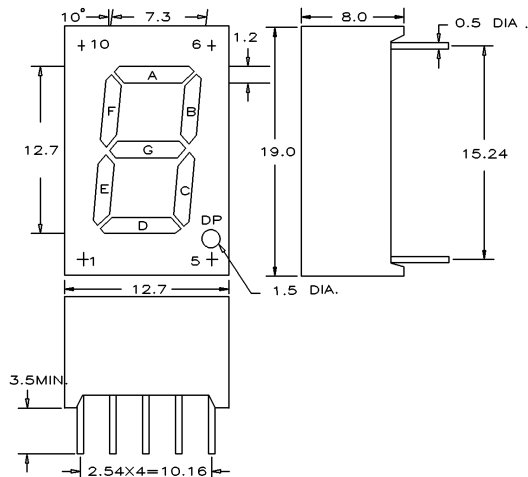
- *LOW CURRENT REQUIREMENTS
- *EXCELLENT CHARACTER APPEARANCE
- *HIGH LIGHT OUTPUT
- *IC COMPATIBLE

ITEM

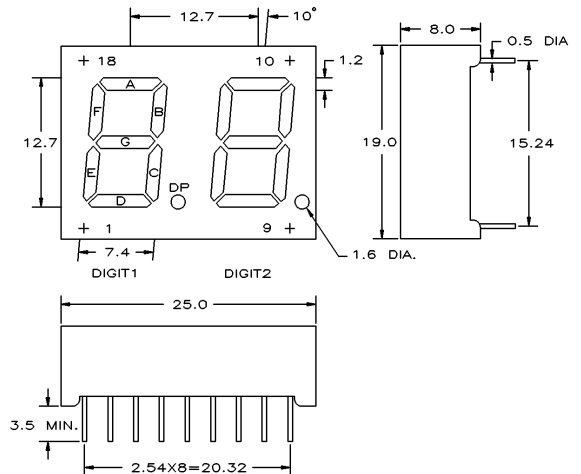
Part No.	Description	Package Dimension	Internal Circuit Diagram
LA50X1-11 Series	COMMON ANODE	A	A
LC50X1-11 Series	COMMON CATHODE	A	B
LA50X2-11 Series	COMMON ANODE DIRECT DRIVE	B	C
LC50X2-11 Series	COMMON CATHODE DIRECT DRIVE	B	D
LD50X2-11 Series	COMMON ANODE DUPLEX DRIVE	C	E
LE50X2-11 Series	COMMON CATHODE DUPLEX DRIVE	C	F
LN50X3-12 Series	COMMON ANODE MULTIPLEX DRIVE	D	G

Package Dimensions

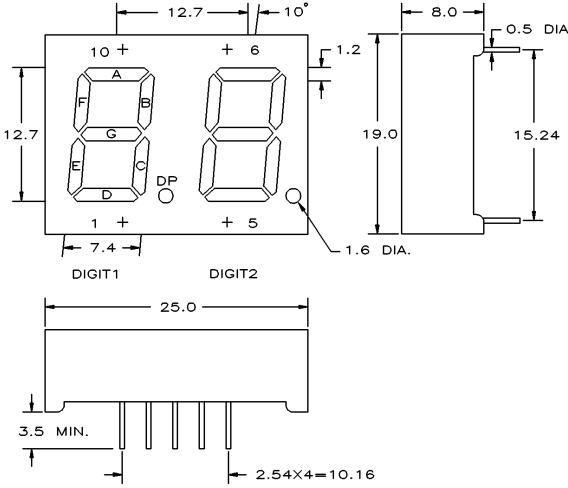
A. LA(C)50X1-11 SERIES



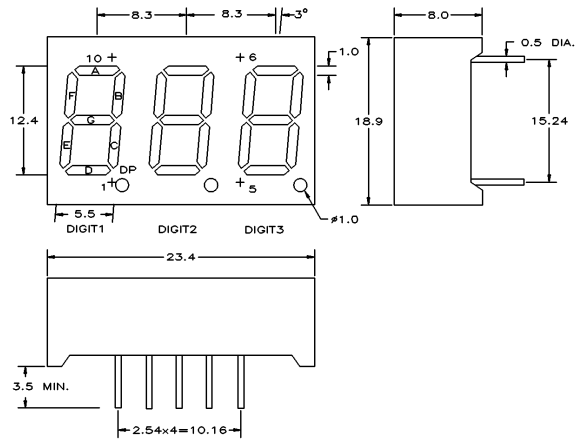
B. LA(C)50X2-11 SERIES



C. LD(E)50X2-11 SERIES



D. LN50X3-12 SERIES



NOTES:

- 1. All dimensions are in millimeters. Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
- 2. The slope angle of any pin may be $\pm 5.0^\circ$ max.

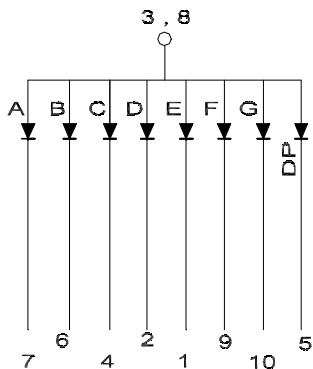
Pin Function

Pin No.	Function			
	LA50X1-11	LC50X1-11	LA50X2-11	LC50X2-11
1	CATHODE E	ANODE E	CATHODE E DIGIT 1	ANODE E DIGIT 1
2	CATHODE D	ANODE D	CATHODE D DIGIT 1	ANODE D DIGIT 1
3	COMMON ANODE	COMMON CATHODE	CATHODE C DIGIT 1	ANODE C DIGIT 1
4	CATHODE C	ANODE C	CATHODE DP DIGIT 1	ANODE DP DIGIT 1
5	CATHODE DP	ANODE DP	CATHODE E DIGIT 2	ANODE E DIGIT 2
6	CATHODE B	ANODE B	CATHODE D DIGIT 2	ANODE D DIGIT 2
7	CATHODE A	ANODE A	CATHODE G DIGIT 2	ANODE G DIGIT 2
8	COMMON ANODE	COMMON CATHODE	CATHODE C DIGIT 2	ANODE C DIGIT 2
9	CATHODE F	ANODE F	CATHODE DP DIGIT 2	ANODE DP DIGIT 2
10	CATHODE G	ANODE G	CATHODE B DIGIT 2	ANODE B DIGIT 2
11			CATHODE A DIGIT 2	ANODE A DIGIT 2
12			CATHODE F DIGIT 2	ANODE F DIGIT 2
13			COMMON ANODE DIGIT 2	COMMON CATHODE DIGIT 2
14			COMMON ANODE DIGIT 1	COMMON CATHODE DIGIT 1
15			CATHODE B DIGIT 1	ANODE B DIGIT 1
16			CATHODE A DIGIT 1	ANODE A DIGIT 1
17			CATHODE G DIGIT 1	ANODE G DIGIT 1
18			CATHODE F DIGIT 1	ANODE F DIGIT 1

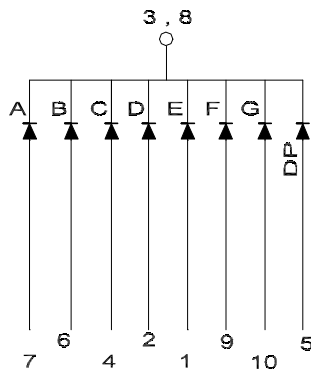
Pin No.	Function		
	LD50X2-11	LE50X2-11	LN50X3-12
1	CATHODE D	ANODE D	CATHODE D
2	CATHODE DP	ANODE DP	COMMON ANODE DIGIT 1
3	CATHODE E	ANODE E	CATHODE E
4	CATHODE C	ANODE C	CATHODE C
5	COMMON ANODE DIGIT 2	COMMON CATHODE DIGIT 2	COMMON ANODE DIGIT 3
6	CATHODE B	ANODE B	CATHODE B
7	CATHODE A	ANODE A	CATHODE A
8	CATHODE F	ANODE F	CATHODE F
9	CATHODE G	ANODE G	CATHODE G
10	COMMON ANODE DIGIT 1	COMMON CATHODE DIGIT 1	COMMON ANODE DIGIT 2

Internal Circuit Diagrams

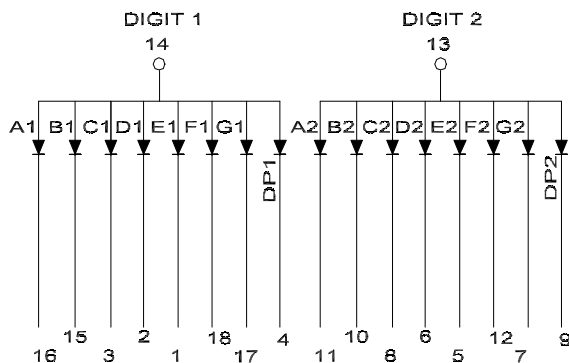
A. LA50X1-11



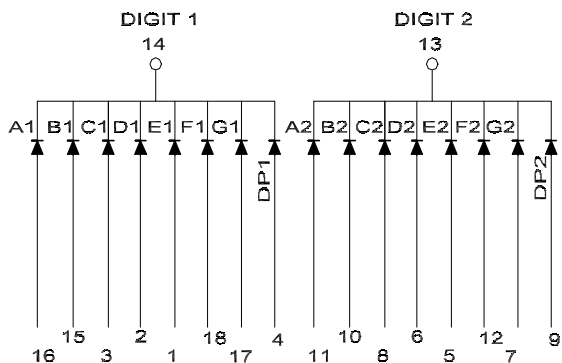
B. LC50X1-11



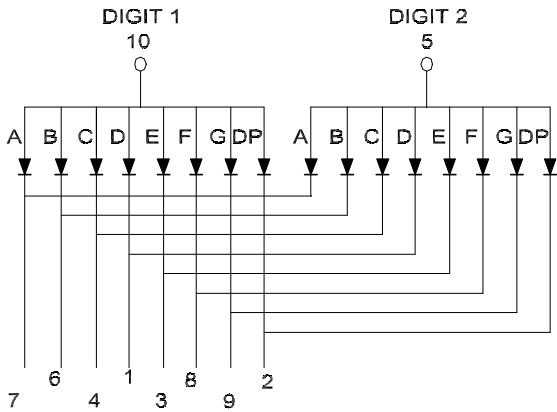
C. LA50X2-11



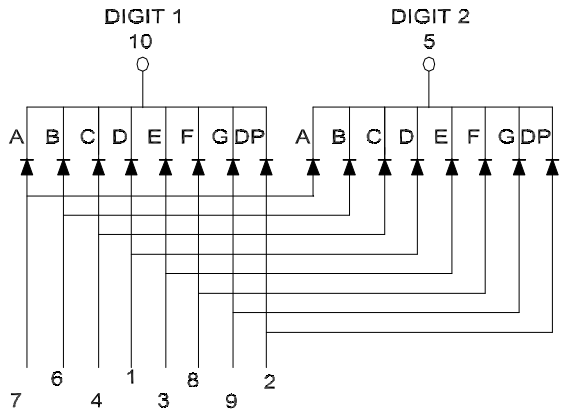
D. LC50X2-11



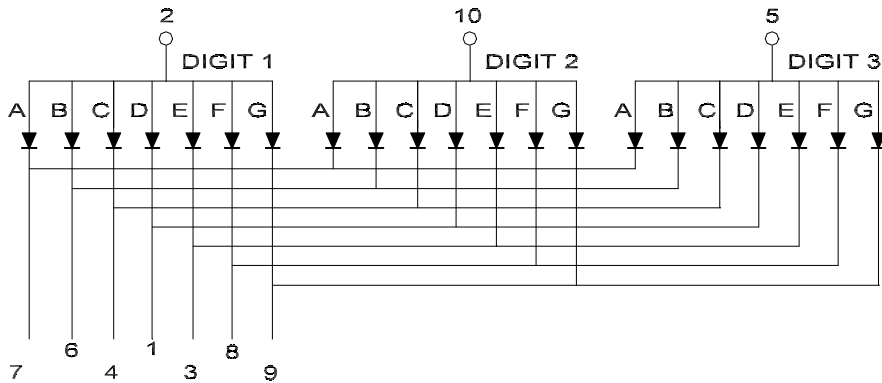
E. LD50X2-11



F. LE50X2-11



G. LN50X3-12



Absolute Maximum Ratings at T_A=25°C

REVERSE VOLTAGE PER LED CHIP (<100μA).SUPERBRIGHT RED 4.0V,GaAsP RED 3.0V,OTHER 5.0V	
D.C. FORWARD CURRENT PER LED CHIP.....	30mA
PULSE CURRENT (1/10 DUTY CYCLE,0.1ms PULSE WIDTH) PER LED CHIP.....	100mA
OPERATING TEMPERATURE RANGE.....	-25°C TO +85°C
STORAGE TEMPERATURE RANGE.....	...-25°C TO +100°C
LEAD SOLDERING TEMP.(1.6mm FROM SEATING PLANE).....	260°C FOR 3 SEC.

Electrical/Optical Characteristics And Curves at T_A=25°C

LA(C)50X1-11

PART NUMBER		LED CHIP		PEAK WAVELENGTH @20mA(nm)	FORWARD VOLTAGE @20mA(V)		LUMINOUS INTENSITY @10mA(mcd)	
COMMON ANODE	COMMON CATHODE	MATERIAL	EMITTING COLOR		TYP.	MAX.	MIN.	TYP.
					LA5011-11	LC5011-11	GaAsP	RED
LA5051-11	LC5051-11	GaP	RED	700	2.1	3.0	0.5	0.8
LA5021-11	LC5021-11	GaP	GREEN	567	2.1	2.6	1.7	2.9
LA5031-11	LC5031-11	GaAsP ON GaP	YELLOW	585	2.1	3.0	1.4	2.3
LA5041-11	LC5041-11	GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LA5041R-11	LC5041R-11	GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LA5071-11	LC5071-11	GaAlAs ON GaAs	SUPERBRIGHT RED	660	1.7	2.2	7.7	12.8

LA(C)50X2-11

PART NUMBER		LED CHIP		PEAK WAVELENGTH @20mA(nm)	FORWARD VOLTAGE @20mA(V)		LUMINOUS INTENSITY @10mA(mcd)	
COMMON ANODE	COMMON CATHODE	MATERIAL	EMITTING COLOR		TYP.	MAX.	MIN.	TYP.
					LA5012-11	LC5012-11	GaAsP	RED
LA5052-11	LC5052-11	GaP	RED	700	2.1	3.0	0.5	0.8
LA5022-11	LC5022-11	GaP	GREEN	567	2.1	2.6	1.7	2.9
LA5032-11	LC5032-11	GaAsP ON GaP	YELLOW	585	2.1	3.0	1.4	2.3
LA5042-11	LC5042-11	GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LA5042R-11	LC5042R-11	GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LA5072-11	LC5072-11	GaAlAs ON GaAs	SUPERBRIGHT RED	660	1.7	2.2	7.7	12.8

LD(E)50X2-11

PART NUMBER		LED CHIP		PEAK WAVELENGTH @20mA(nm)	FORWARD VOLTAGE @20mA(V)		LUMINOUS INTENSITY @10mA(mcd)	
COMMON ANODE	COMMON CATHODE	MATERIAL	EMITTING COLOR		TYP.	MAX.	MIN.	TYP.
					LD5012-11	LE5012-11	GaAsP	RED
LD5052-11	LE5052-11	GaP	RED	700	2.1	3.0	0.5	0.8
LD5022-11	LE5022-11	GaP	GREEN	567	2.1	2.6	1.7	2.9
LD5032-11	LE5032-11	GaAsP ON GaP	YELLOW	585	2.1	3.0	1.4	2.3
LD5042-11	LE5042-11	GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LD5042R-11	LE5042R-11	GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LD5072-11	LE5072-11	GaAlAs ON GaAs	SUPERBRIGHT RED	660	1.7	2.2	7.7	12.8

LN50X3-12

PART NUMBER		LED CHIP		PEAK WAVELENGTH @20mA(nm)	FORWARD VOLTAGE @20mA(V)		LUMINOUS INTENSITY @10mA(mcd)	
		MATERIAL	EMITTING COLOR		TYP.	MAX.	MIN.	TYP.
					LN5013-12		GaAsP	RED
LN5053-12		GaP	RED	700	2.1	3.0	0.5	0.8
LN5023-12		GaP	GREEN	567	2.1	2.6	1.7	2.9
LN5033-12		GaAsP ON GaP	YELLOW	585	2.1	3.0	1.4	2.3
LN5043-12		GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LN5043R-12		GaAsP ON GaP	ORANGE	635	2.1	3.0	2.0	3.3
LN5073-12		GaAlAs ON GaAs	SUPERBRIGHT RED	660	1.7	2.2	7.7	12.8