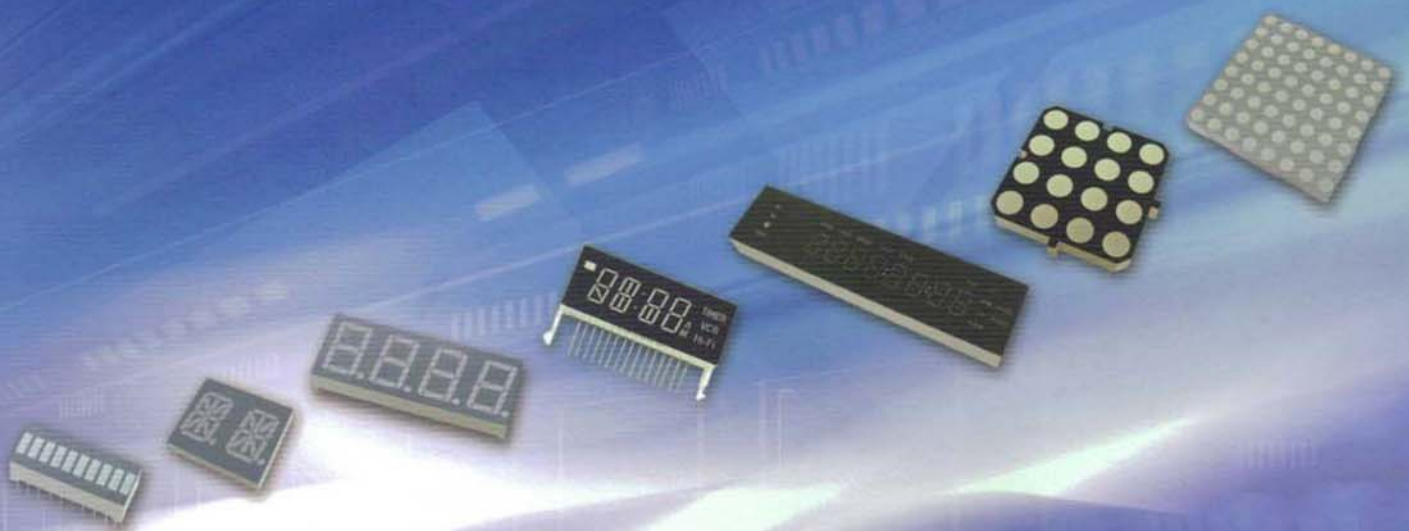


# OPTO ELECTRONIC COMPONENTS



**LIGITEK**

Short Form

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# LED DISPLAY MODEL DESIGNATION SYSTEM

$\frac{L}{A}$     $\frac{S}{B}$     $\frac{D}{C}$     $\frac{18}{D}$     $\frac{0}{E}$     $\frac{6}{F}$     $\frac{4}{G}$    —    $\frac{2}{H}$     $\frac{0}{I}$    —    $\frac{PF}{J}$

## A: Ligitek

## B: Number Of Digital

"S"	Single Digit
"D"	Dual Digit
"T"	Triple Digit
"F"	Four Digit
"B"	Bar Graph Display

## C: Display

## D: Digit Height Of Characters

"2"	0.2"~0.29"
"3"	0.3"~0.39"
"4"	0.4"~0.49"
"5"	0.5"~0.59"
"6"	0.6"~0.69"
"8"	0.8"~0.89"
"18"	1.8"~1.89"
"23"	2.3"~2.39"
"40"	4.0"~4.09"
"50"	5.0"~5.09"

## E: Modification

## F: Polarization

Odd:Common Cathode    Even:Common Anode

## G: Emitted Color & Material

"2"	Green & GaP 565nm
"2V"	Hi-Effi. Green & GaP 565nm
"3"	Yellow & GaAsP/GaP 585nm
"4"	Hi-Effi. Red & GaAsP/GaP 635nm
"5"	Super Red & GaAlAs 660nm
"6"	Hi-Super Red & GaAlAs 660nm
"7"	Ultra Super Red & GaAlAs 660nm
"8"	Ultra Yellow & AlGaInP 595nm
"2P"	Pure Green & GaP 555nm
"9(9SEF)"	Soft Orange & AlGaInP 605nm
"A(9UG)"	Ultra Super Green & AlGaInP 574nm
"C(8SR)"	Super Red & GaAlAs 660nm
"SBKS"	Super blue & InGaN/SiC 470nm

## H: Color Of Display Face

"0"	Original Color
"1"	Black Color
"2"	Gray Color
"3"	Red Color
"4"	Orange Color

## I: Color Of Segment

"0"	White Diffused
"1"	Red Diffused
"2"	Green Diffused
"3"	Yellow Diffused
"4"	Orange Diffused
"5"	Water Clear
"6"	Orange Transparent
"7"	Red Transparent

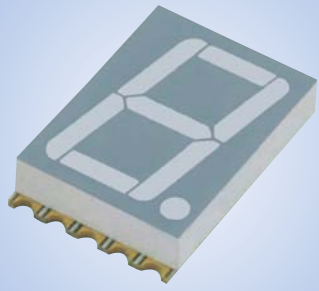
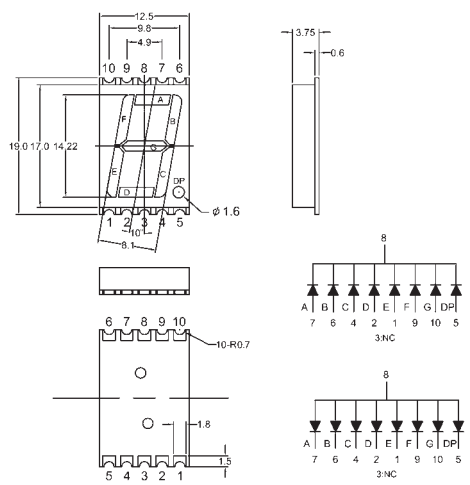
## J: Lead Free Process



# LED DOT MATRIX MODEL DESIGNATION SYSTEM

$\frac{L}{A}$     $\frac{MD}{B}$     $\frac{57}{C}$     $\frac{2}{D}$     $\frac{1}{E}$     $\frac{A}{F}$     $\frac{EG}{G}$     $\frac{R}{H}$    —    $\frac{1}{I}$     $\frac{0}{J}$    —    $\frac{PF}{K}$

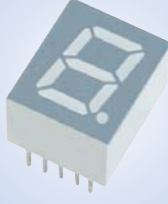
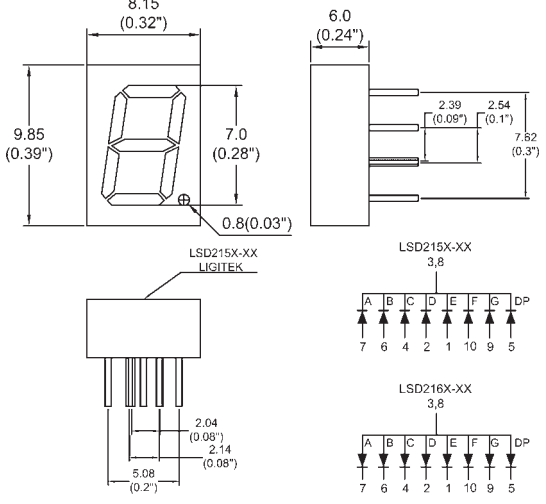
A:Ligitek	B:Dot Matrix	C:Dot x Dot	D:Digit High	E:Polarization	F:Modification
G:Dice	H:Red "E"dice	I:Color of Face	J:Color of Dot	K:Lead Free Process	

Part No.	Chip			Vf(v) @20mA		Iv(μcd) @10mA		CC or CA
	Material	Emitted Color	λp(nm)	Min.	Max.	Min.	Typ.	
 								
LSSD511DBK-XX	InGaN/GaN*	Blue	470		4.0	18000	37000	CC
LSSD5112DBK-XX								CA
LSSD5115F-XX	GaP	Red	630	1.5	2.4	6100	10500	CC
LSSD5125F-XX								CA
LSSD5112-XX	GaP	Green	565	1.7	2.6	2350	4000	CC
LSSD5122-XX								CA

\*: λD(nm)

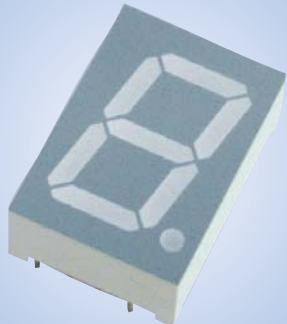
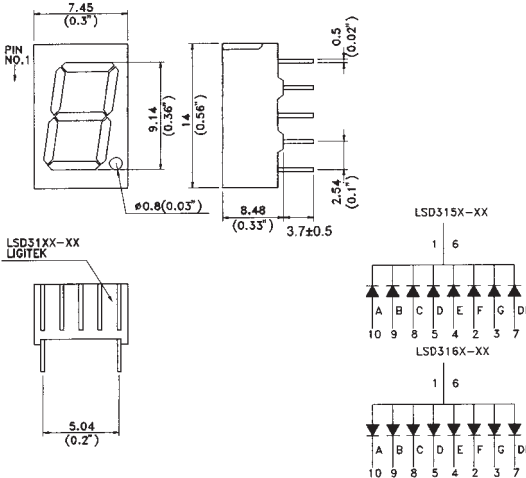


Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	

\*:  $\lambda$ D(nm)

LSD2155-XX	GaAlAs	Super Red	660	1.5	2.4	3.05	5	CC
LSD2153HS-XX	AlGaInP*	Yellow	587	1.7	2.6	18	31	
LSD215SBKS-XX	InGaN/SiC*	Blue	475		4.2	18	31	
LSD2165-XX	GaAlAs	Super Red	660	1.5	2.4	3.05	5	CA
LSD2163HS-XX	AlGaInP*	Yellow	587	1.7	2.6	18	31	
LSD216SBKS-XX	InGaN/SiC*	Blue	475		4.2	18	31	

LSD3152-XX	GaP	Green	565	1.7	2.6	1.0	1.75	CC
LSD3154-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	0.8	1.75	
LSD3155-XX	GaAlAs	Super Red	660	1.5	2.4	1.35	2.35	
LSD3162-XX	GaP	Green	565	1.7	2.6	1.0	1.75	CA
LSD3164-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	0.8	1.75	
LSD3165-XX	GaAlAs	Super Red	660	1.5	2.4	1.35	2.35	

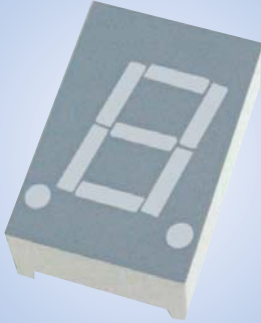
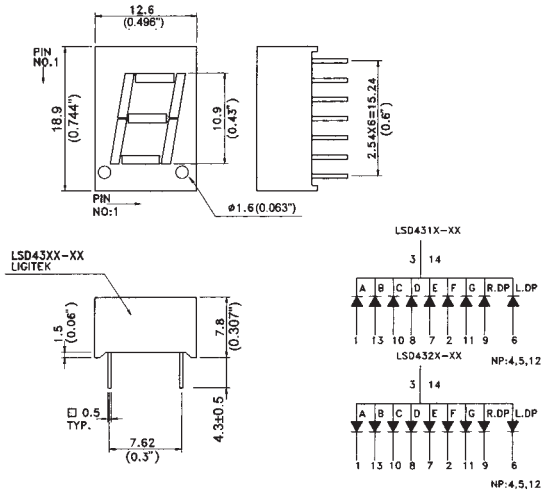
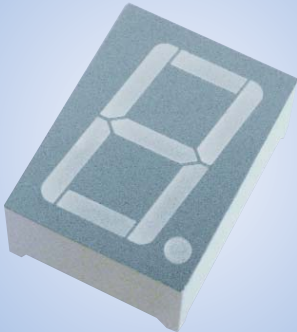
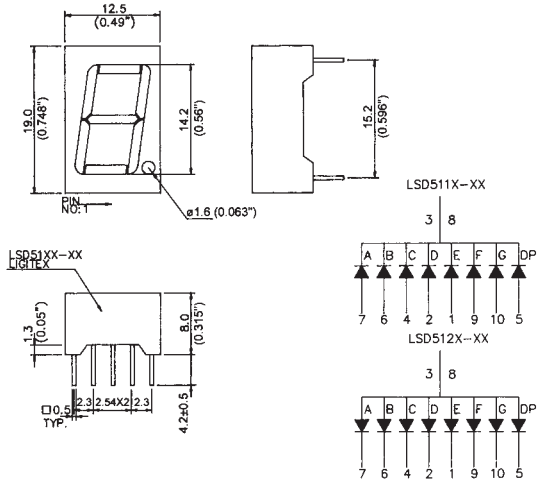
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda_p$ (nm)	Min.	Max.	Min.	Typ.	
LSD3E53HS-XX	AlGaInP*	Yellow	589	1.7	2.8	Segment		CC
						20	33	
						Decimal		
						6.5	11	
<p> <math>\phi 1.2(0.047")</math>  <math>14.0(0.551")</math>  <math>9.9(0.39")</math>  <math>10.0(0.39")</math>  <math>7.0(0.276")</math>  <math>5.08(0.2")</math>  <math>9.76(0.384")</math>  <math>11.0(0.433")</math>  <math>2.35 \times 2 = 4.7(0.185")</math>  <math>3.5 \pm 0.5</math>  <math>0.45</math> TYP.  <math>7.5(0.295")</math>  <math>13.0(0.512")</math>  <math>8.0(0.32")</math>  <math>6.5(0.256")</math>  <math>2.54 \times 4 = 10.16(0.4")</math>  <math>\phi 1.0(0.039")</math>  <math>0.45</math> TYP.  <math>5.08(0.2")</math>  <math>6.9 \pm 0.5</math> </p>								
LSD3352-XX	GaP	Green	565	1.7	2.6	1.75	3.5	CC
LSD3354-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LSD3355-XX	GaAlAs	Super Red	660	1.5	2.4	3.0	5.5	
LSD3362-XX	GaP	Green	565	1.7	2.6	1.75	3.5	CA
LSD3364-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LSD3365-XX	GaAlAs	Super Red	660	1.5	2.4	3.0	5.5	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	

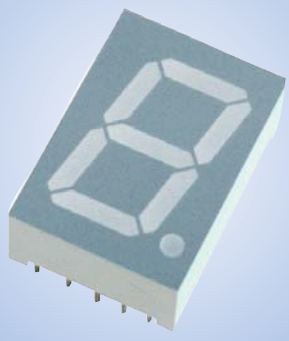
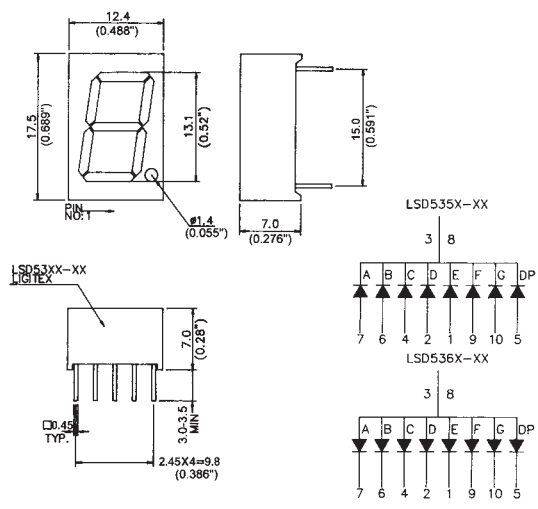
\*:  $\lambda$ D(nm)

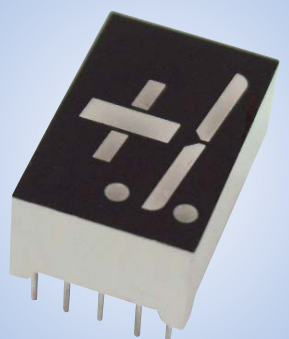
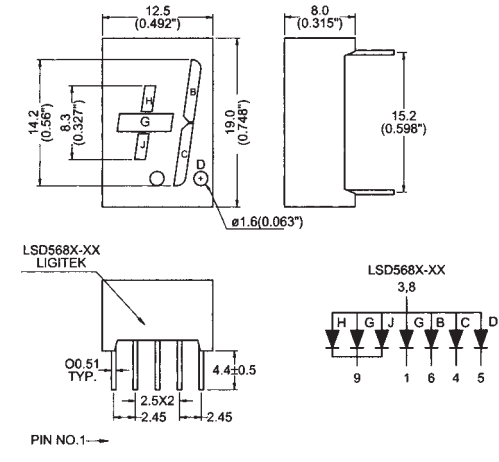
LSD3552-XX	GaP	Green	565	1.7	2.6	1.75	3.5	CC
LSD3554-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	4.0	
LSD3555-XX	GaAIAs	Super Red	660	1.5	2.4	4.0	7.0	
LSD355SBKS-XX	InGaN/SiC*	Blue	475		4.2	7.2	12.8	
LSD3562-XX	GaP	Green	565	1.7	2.6	1.75	3.5	CA
LSD3564-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	4.0	
LSD3565-XX	GaAIAs	Super Red	660	1.5	2.4	4.0	7.0	
LSD356SBKS-XX	InGaN/SiC*	Blue	475		4.2	7.2	12.8	

LSD3C52-XX	GaP	Green	565	1.7	2.6	1.8	3.0	CC
LSD3C54-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.0	2.0	
LSD3C55-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	5.0	
LSD3C62-XX	GaP	Green	565	1.7	2.6	1.8	3.0	CA
LSD3C64-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.0	2.0	
LSD3C65-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	5.0	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	
								
								
LSD4312-XX	GaP	Green	565	1.7	2.6	1.5	2.8	CC
LSD4314-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.8	3.0	
LSD4315-XX	GaAIAs	Super Red	660	1.5	2.4	3.0	5.5	
LSD4322-XX	GaP	Green	565	1.7	2.6	1.5	2.8	CA
LSD4324-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.8	3.0	
LSD4325-XX	GaAIAs	Super Red	660	1.5	2.4	3.0	5.5	
								
								
LSD5112-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CC
LSD5114-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.35	4.0	
LSD5115-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	5.0	
LSD5122-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CA
LSD5124-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.35	4.0	
LSD5125-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	5.0	



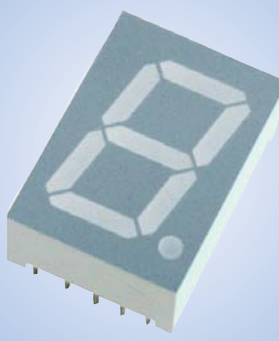
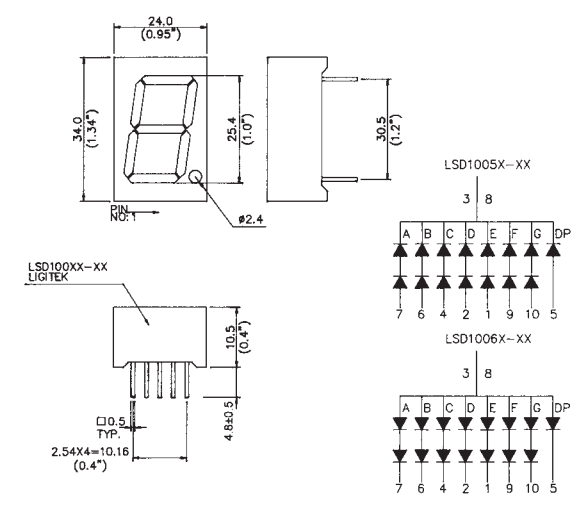
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
								
								
LSD5352-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CC
LSD5354-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	3.05	4.5	
LSD5355-XX	GaAIAs	Super Red	660	1.5	2.4	5.0	8.5	
LSD535SBKS-XX	InGaN/SiC*	Blue	475		4.2	8.5	15.25	
LSD5362-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CA
LSD5364-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	3.05	4.5	
LSD5365-XX	GaAIAs	Super Red	660	1.5	2.4	5.0	8.5	
LSD536SBKS-XX	InGaN/SiC*	Blue	475		4.2	8.5	15.25	

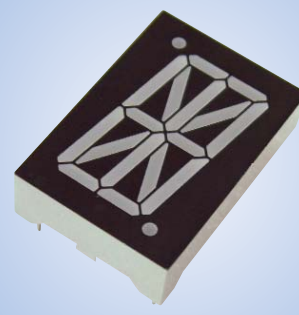
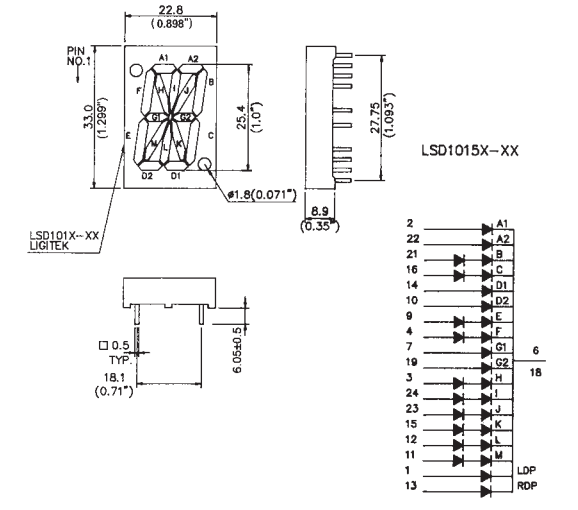
								
								
LSD5682-XX	GaP	Green	565	1.7	2.6	1.0	1.75	CA
LSD5682V-XX	GaP	Hi-Effi.Green	565	1.7	2.6	1.6	2.8	
LSD5684-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	0.8	1.35	
LSD5685-XX	GaAIAs	Super Red	660	1.5	2.4	2.0	3.5	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	λp(nm)	Min.	Max.	Min.	Typ.	

	LSD5A52-XX	GaP	Green	565	1.7	2.6	3.0	5.0	CC
	LSD5A54-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.6	2.8	
	LSD5A55-XX	GaAIAs	Super Red	660	1.5	2.4	3.3	5.6	
	LSD5A62-XX	GaP	Green	565	1.7	2.6	3.0	5.0	CA
	LSD5A64-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.6	2.8	
LSD5A65-XX	GaAIAs	Super Red	660	1.5	2.4	3.3	5.6		

	LSD8152-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CC
	LSD8154-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
	LSD8155-XX	GaAIAs	Super Red	660	1.5	2.4	6.1	10.5	
	LSD8162-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CA
	LSD8164-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LSD8165-XX	GaAIAs	Super Red	660	1.5	2.4	6.1	10.5		

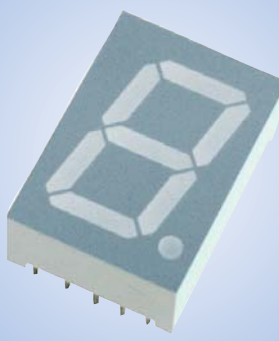
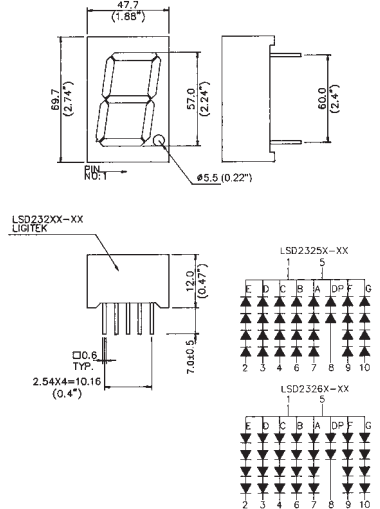
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	λp(nm)	Min.	Max.	Min.	Typ.	
								
								
LSD10052-XX	GaP	Green	565	3.4	5.2	5	8	CC
LSD10054-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	6	10	
LSD10055-XX	GaAIAs	Super Red	660	3.0	4.8	10	18	
LSD10062-XX	GaP	Green	565	3.4	5.2	5	8	CA
LSD10064-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	6	10	
LSD10065-XX	GaAIAs	Super Red	660	3.0	4.8	10	18	

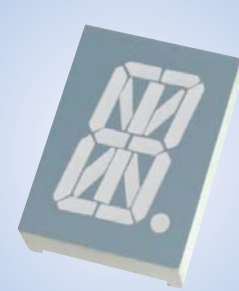
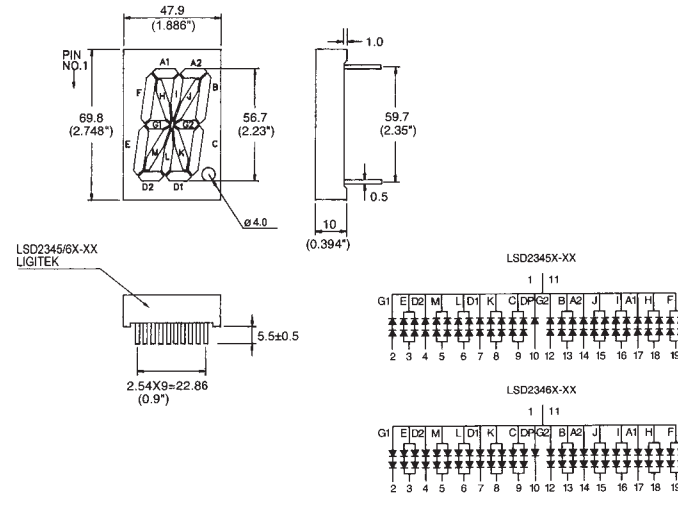
								
								
LSD10152-XX	GaP	Green	565	1.7	2.6	1.75	3.05	CC
LSD10154-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LSD10155-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4.0	
LSD10162-XX	GaP	Green	565	1.7	2.6	1.75	3.05	CA
LSD10164-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LSD10165-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4.0	

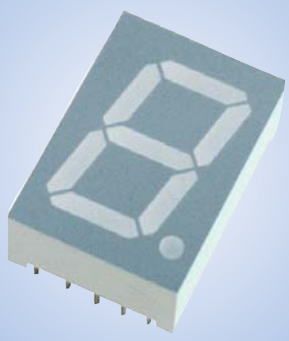
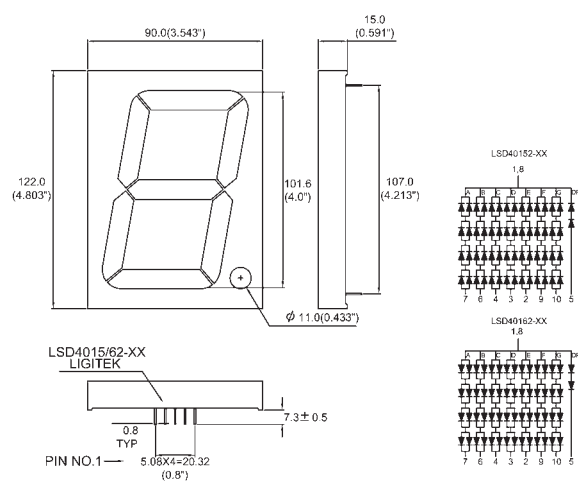
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	λp(nm)	Min.	Max.	Min.	Typ.	
LSD1525EGR-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	10	18	CC
	GaP	Green	565	3.4	5.2	8	15	
LSD1526EGR-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	10	18	CA
	GaP	Green	565	3.4	5.2	8	15	


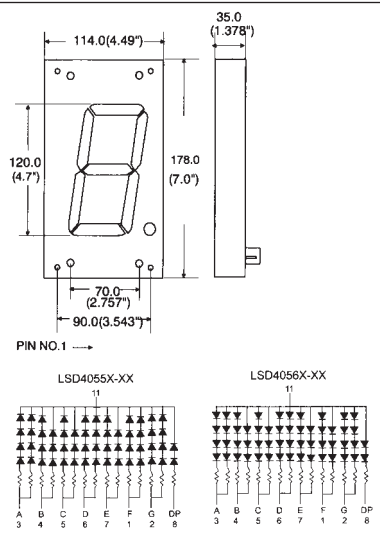
	LSD18052-XX	GaP	Green	565	5.1	7.8	7.0	12	CC
	LSD18054-XX	GaAsP/GaP	Hi-Effi.Red	635	5.1	7.8	9.0	15	
	LSD18055-XX	GaAlAs	Super Red	660	4.5	7.2	12	20	
	LSD18062-XX	GaP	Green	565	5.1	7.8	7.0	12	CA
	LSD18064-XX	GaAsP/GaP	Hi-Effi.Red	635	5.1	7.8	12	15	
LSD18065-XX	GaAlAs	Super Red	660	4.5	7.2	12	20		

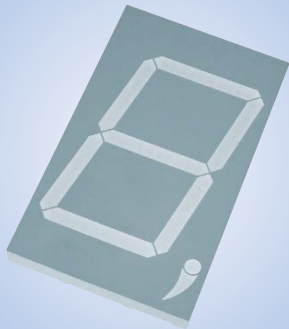
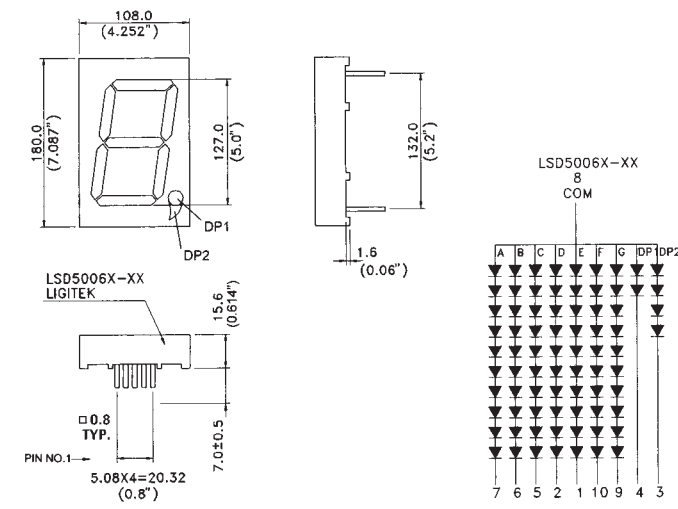



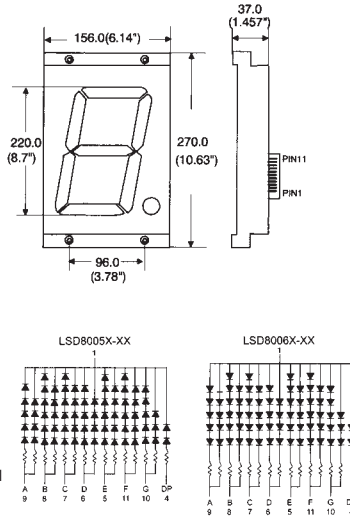
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
								
								
*: $\lambda$ D(nm)								
LSD23252-XX	GaP	Green	565	6.8	10.4	10.5	18	CC
LSD23254-XX	GaAsP/GaP	Hi-Effi.Red	635	6.8	10.4	10.5	18	
LSD23255-XX	GaAIAs	Super Red	660	6.0	9.6	18	30	
LSDS225SBKS-XX	InGaN/SiC*	Blue	475		16.8	10.5	15.25	
LSD23262-XX	GaP	Green	565	6.8	10.4	10	18	CA
LSD23264-XX	GaAsP/GaP	Hi-Effi.Red	635	6.8	10.4	10	18	
LSD23265-XX	GaAIAs	Super Red	660	6.0	9.6	18	30	
LSD23266SBKS-XX	InGaN/SiC*	Blue	475		16.8	10.5	15.25	

								
								
LSD23452P-XX	GaP	Pure Green	555	3.4	5.2	6.1	10.5	CC
LSD23453-XX	GaAsP/GaP	Yellow	585	3.4	5.2	6.1	10.5	
LSD23454-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	7.2	12	
LSD23455-XX	GaAIAs	Super Red	660	3.0	4.8	8.5	16	
LSD23462P-XX	GaP	Green	555	3.4	5.2	6.1	10.5	CA
LSD23463-XX	GaAsP/GaP	Yellow	585	3.4	5.2	6.1	10.5	
LSD23464-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	7.2	12	
LSD23465-XX	GaAIAs	Super Red	660	3.0	4.8	8.5	16	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA	
	Material	Emitted Color	$\lambda_p$ (nm)	Min.	Max.	Min.	Typ.		
									
	LSD40152-XX	GaP	Green	565	6.8	10.4	8.5	12.8	CC
	LSD40154-XX	GaAsP/GaP	Hi-Effi.Red	635	6.8	10.4	12.8	21.5	
	LSD40155-XX	GaAIAs	Super Red	660	6.0	9.6	10.5	18	
	LSD40156-XX	GaAIAs	Hi-Super Red	660	6.0	9.6	26	43	
	LSD40162-XX	GaP	Green	565	6.8	10.4	8.5	12.8	CA
	LSD40164-XX	GaAsP/GaP	Hi-Effi.Red	635	6.8	10.4	12.8	21.5	
	LSD40165-XX	GaAIAs	Super Red	660	6.0	9.6	10.5	18	
LSD40166-XX	GaAIAs	Hi-Super Red	660	6.0	9.6	26	43		

									
	LED LAMP : LX2640/P1 *: $\lambda_D$ (nm)								
	LSD40557-XX	GaAIAs	Ultra Super Red	660	6.0	9.6	42	70	CC
	LSD40558-XX	AlGaInP*	Ultra Yellow	595	6.8	11.2	42	70	
LSD40567-XX	GaAIAs	Ultra Super Red	660	6.0	9.6	42	70	CA	
LSD40568-XX	AlGaInP*	Ultra Yellow	595	6.8	11.5	42	70		

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
								
								
LSD50062-XX	GaP	Green	565	17	26	7.2	12.8	CA
LSD50064-XX	GaAsP/GaP	Hi-Effi.Red	635	17	26	18	35	
LSD50065-XX	GaAIAs	Super Red	660	15	24	26	45	
LSD50066-XX	GaAIAs	Hi-Super Red	660	15	24	54	90	
LSD50052-XX	GaP	Green	565	17	26	7.2	12.8	CC
LSD50054-XX	GaAsP/GaP	Hi-Effi.Red	635	17	26	18	35	
LSD50055-XX	GaAIAs	Super Red	660	15	24	26	45	
LSD50056-XX	GaAIAs	Hi-Super Red	660	15	24	54	90	

								
								
LED LAMP : LUR2640/P1 or LUY2640/P1 *: $\lambda$ D(nm)								
LSD80057-10	GaAIAs	Ultra Super Red	660	7.5	12	50	85	CC
LSD80058-10	AlGaInP*	Ultra Yellow	595	8.5	13	50	85	
LSD80067-10	GaAIAs	Ultra Super Red	660	7.5	12	50	85	CA
LSD80068-10	AlGaInP*	Ultra Yellow	595	7.5	13	50	85	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	

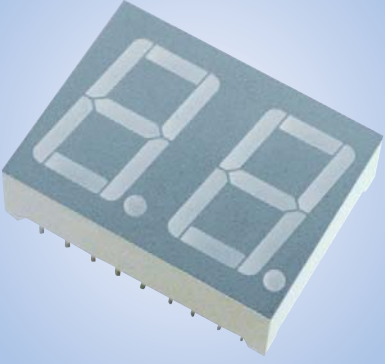
LDD3052-XX	GaP	Green	565	1.7	2.6	1.75	3.05	CC
LDD3054-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	0.8	1.35	
LDD3055-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4.0	
LDD3062-XX	GaP	Green	565	1.7	2.6	1.75	3.05	CA
LDD3064-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	0.8	1.35	
LDD3065-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4.0	

LDD4252-XX	GaP	Green	565	1.7	2.8	1.0	1.75	CC
LDD4254-XX	GaAsP/GaP	Orange	635	1.7	2.8	0.8	1.35	
LDD4255-XX	GaAIAs	Red	660	1.5	2.4	1.75	3.05	
LDD425SBKS-XX	InGaN/SiC*	Blue	475		4.2	2.35	4.0	CA
LDD4262-XX	GaP	Green	565	1.7	2.8	1.0	1.75	
LDD4264-XX	GaAsP/GaP	Orange	635	1.7	2.8	1.8	1.35	
LDD4265-XX	GaAIAs	Red	660	1.5	2.4	1.75	3.05	
LDD426SBKS-XX	InGaN/SiC*	Blue	475		4.2	2.35	4.0	

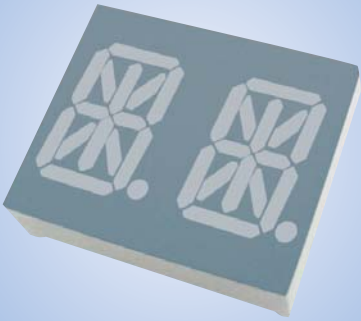
\*:  $\lambda$ D(nm)



Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	

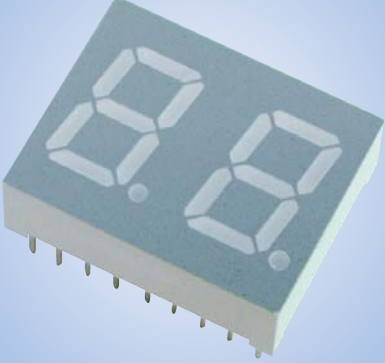
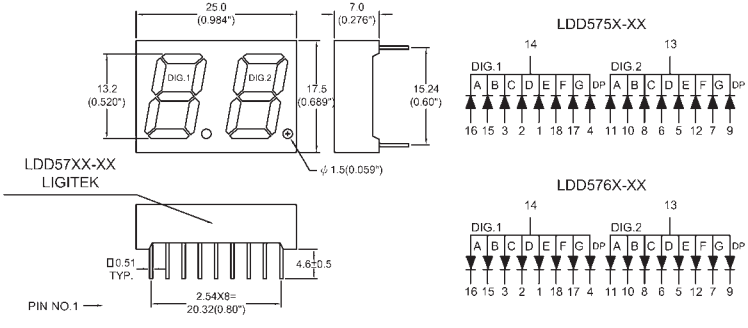


LDD5112-XX	GaP	Green	565	1.7	2.6	4.0	6.1	CC
LDD5114-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LDD5115-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	6.1	
LDD5122-XX	GaP	Green	565	1.7	2.6	4.0	6.1	CA
LDD5124-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LDD5125-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	6.1	



LDD5252-XX	GaP	Green	565	1.7	2.6	1.35	2.8	CC
LDD5254-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.0	
LDD5255-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	5.0	
LDD5262-XX	GaP	Green	565	1.7	2.6	1.35	2.8	CA
LDD5264-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.0	
LDD5265-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	5.0	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	

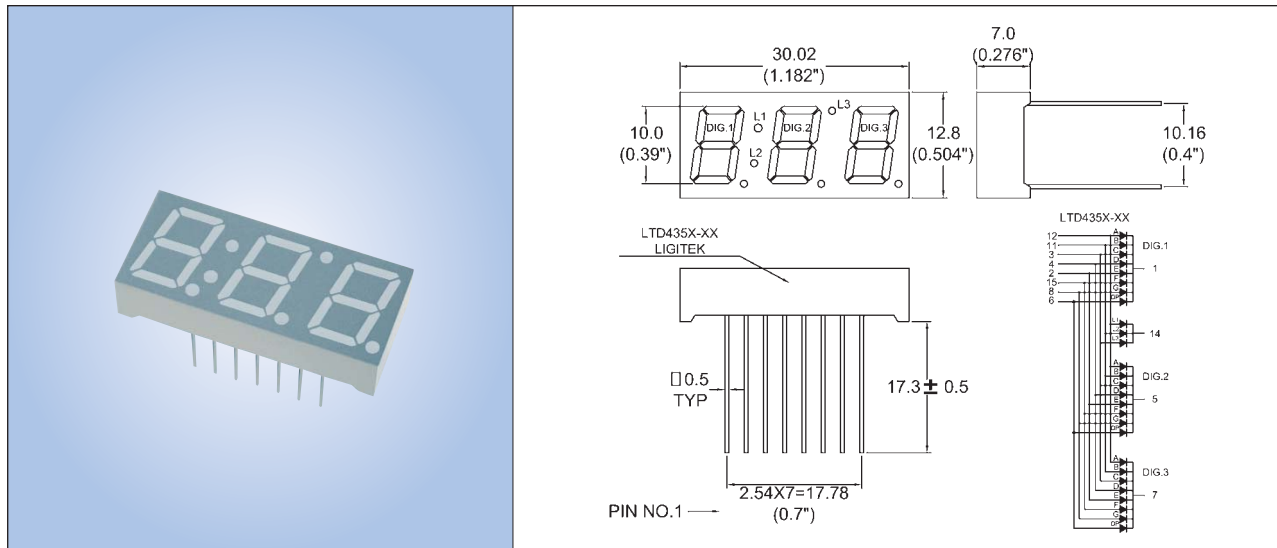
LDD5752-XX	GaP	Green	565	1.7	2.8	2.2	3.7	CC
LDD5753-XX	GaAsP/GaP	Yellow	585	1.7	2.8	2.0	3.4	
LDD5754-XX	GaAsP/GaP	Orange	635	1.7	2.8	2.0	3.7	
LDD5755-XX	GaAlAs	Red	660	1.5	2.4	2.9	4.8	
LDD5762-XX	GaP	Green	565	1.7	2.8	2.2	3.7	CA
LDD5763-XX	GaAsP/GaP	Yellow	585	1.7	2.8	2.0	3.4	
LDD5764-XX	GaAsP/GaP	Orange	635	1.7	2.8	2.0	3.7	
LDD5765-XX	GaAlAs	Red	660	1.5	2.4	2.9	4.8	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	

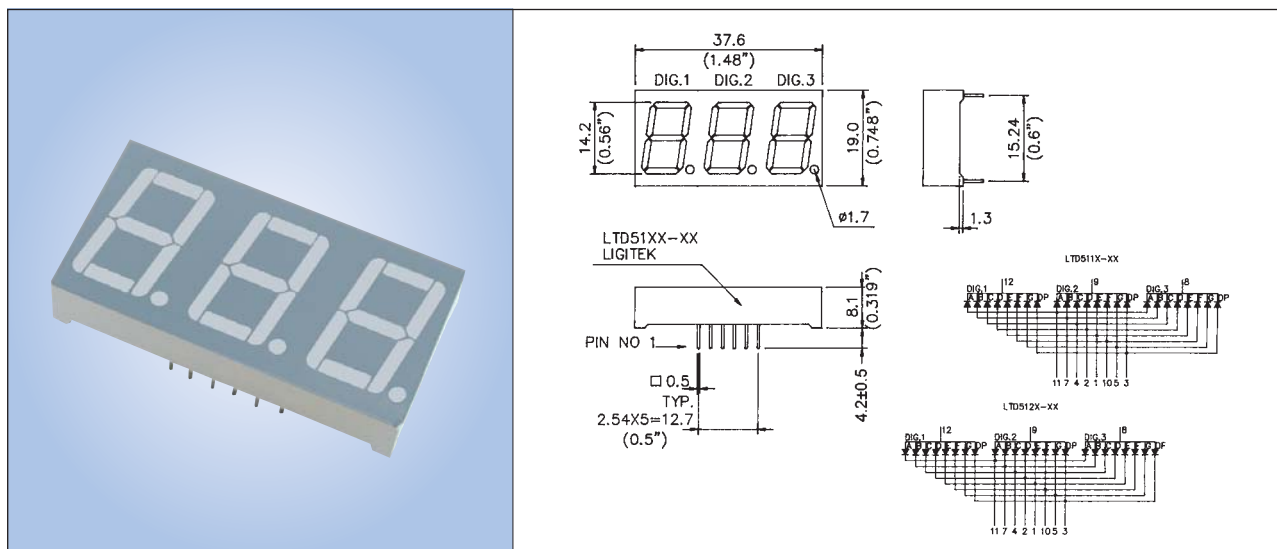
LTD3152-XX	GaP	Green	565	1.7	2.6	1.0	2.0	<b>CC</b>
LTD3154-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.0	2.0	
LTD3155-XX	GaAIAs	Super Red	660	1.5	2.4	1.75	3.05	
LTD3162-XX	GaP	Green	565	1.7	2.6	1.0	2.0	<b>CA</b>
LTD3164-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.0	2.0	
LTD3165-XX	GaAIAs	Super Red	660	1.5	2.4	1.75	3.05	

LTD4152-XX	GaP	Green	565	1.7	2.6	2.0	3.5	<b>CC</b>
LTD4154-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LTD4155-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	6.1	
LTD4162-XX	GaP	Green	565	1.7	2.6	2.0	3.5	<b>CA</b>
LTD4164-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.75	3.05	
LTD4165-XX	GaAIAs	Super Red	660	1.5	2.4	3.05	6.1	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	λp(nm)	Min.	Max.	Min.	Typ.	



LTD4352-XX	GaP	Green	565	1.7	2.6	2.35	4	CC
LTD4355-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4	
LTD4362-XX	GaP	Green	565	1.7	2.6	2.35	4	CA
LTD4365-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4	



LTD5112-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CC
LTD5114-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.35	4.0	
LTD5115-XX	GaAIAs	Super Red	660	1.5	2.4	4	7.2	
LTD5122-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CA
LTD5124-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.35	4.0	
LTD5125-XX	GaAIAs	Super Red	660	1.5	2.4	4	7.2	



Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	


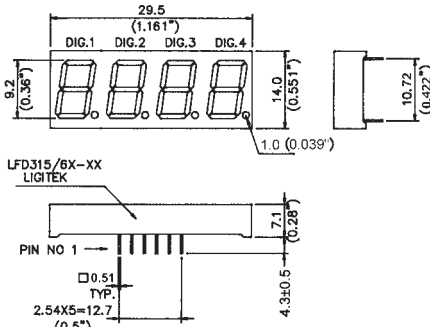
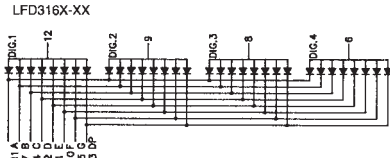
LFD2112-XX	GaP	Green	565	1.7	2.6	1.35	2.35	CC
LFD2114-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.0	2.0	
LFD2115-XX	GaAIAs	Super Red	660	1.5	2.4	1.75	3.05	
LFD2122-XX	GaP	Green	565	1.7	2.6	1.35	2.35	CA
LFD2124-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.0	2.0	
LFD2125-XX	GaAIAs	Super Red	660	1.5	2.4	1.75	3.05	

LFD2662-XX	GaP	Green	565	1.7	2.6	1.75	3.05	CC
LFD2664-XX	GaAsP/GaP	Orange	635	1.7	2.6	1.35	2.35	
LFD2652-XX	GaP	Green	565	1.7	2.6	1.75	3.05	CA
LFD2654-XX	GaAsP/GaP	Orange	635	1.7	2.6	1.35	2.35	


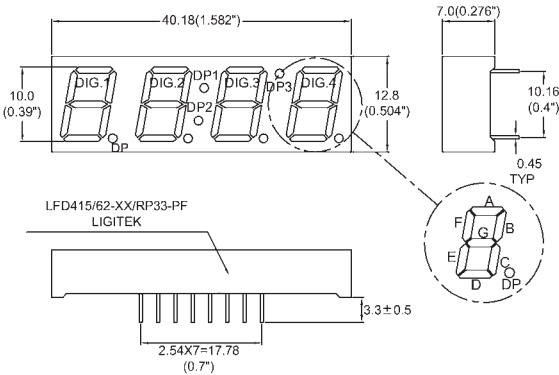
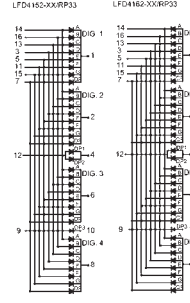


# FOUR DIGIT DISPLAY

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda_p$ (nm)	Min.	Max.	Min.	Typ.	

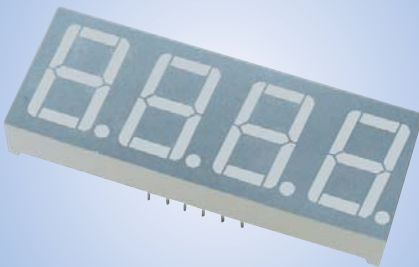
LFD3152-XX	GaP	Green	565	1.7	2.6	1.0	1.75	CC
LFD3154-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.5	4.0	
LFD3155-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4	
LFD3162-XX	GaP	Green	565	1.7	2.6	1.0	1.75	CA
LFD3164-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.5	4.0	
LFD3165-XX	GaAIAs	Super Red	660	1.5	2.4	2.35	4	

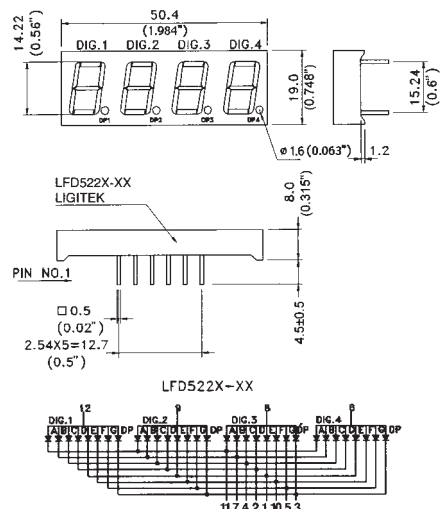




LFD4152-XX/RP33	GaP	Green	565	1.7	2.6	1.75	3.05	CC
LFD4155-XX/RP33	GaAIAs	Red	660	1.5	2.4	3.05	5	
LFD4162-XX/RP33	GaP	Green	565	1.7	2.6	1.75	3.05	CA
LFD4165-XX/RP33	GaAIAs	Red	660	1.5	2.4	3.05	5	

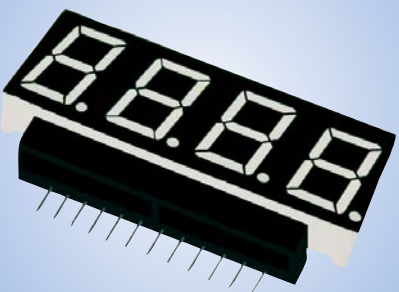
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
LFD4562-XX/S1	GaP	Green	565	1.7	2.6	2.0	3.5	CC
LFD4952-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CC
LFD4955-XX	GaAlAs	Super Red	660	1.5	2.4	4.0	7.2	
LFD4962-XX	GaP	Green	565	1.7	2.6	2.35	4.0	CA
LFD4965-XX	GaAlAs	Super Red	660	1.5	2.4	4.0	7.2	

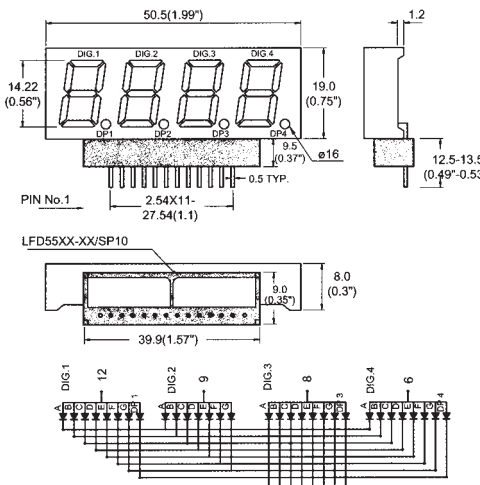
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	





LFD5212-XX	GaP	Green	565	1.7	2.6	1.75	2.8	<b>CC</b>
LFD5214-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.35	4.0	
LFD5215-XX	GaAlAs	Super Red	660	1.5	2.4	4.0	6.0	
LFD5216-XX	GaAlAs	Hi-Super Red	660	1.5	2.4	7.2	12	
LFD5222-XX	GaP	Green	565	1.7	2.6	1.75	2.8	<b>CA</b>
LFD5224-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.35	4.0	
LFD5225-XX	GaAlAs	Super Red	660	1.5	2.4	4.0	6.0	
LFD5226-XX	GaAlAs	Hi-Super Red	660	1.5	2.4	7.2	12	





LFD5512-XX/SP10	GaP	Green	565	1.7	2.6	1.7	2.8	<b>CC</b>
LFD5513-XX/SP10	GaAsP/GaP	Yellow	585	1.7	2.6	1.6	2.6	
LFD5514-XX/SP10	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.7	2.8	
LFD5515-XX/SP10	GaAlAs	Super Red	660	1.5	2.4	2.2	3.6	
LFD5522-XX/SP10	GaP	Green	565	1.7	2.6	1.7	2.8	<b>CA</b>
LFD5523-XX/SP10	GaAsP/GaP	Yellow	585	1.7	2.6	1.6	2.6	
LFD5524-XX/SP10	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	1.7	2.8	
LFD5525-XX/SP10	GaAlAs	Super Red	660	1.5	2.4	2.2	3.6	



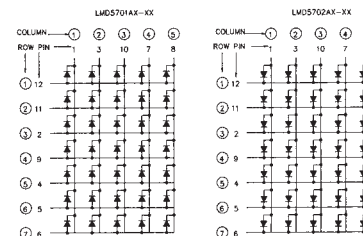
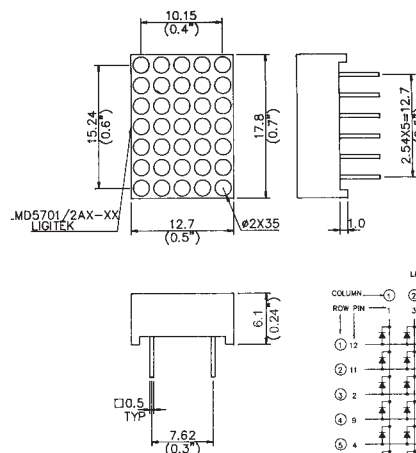
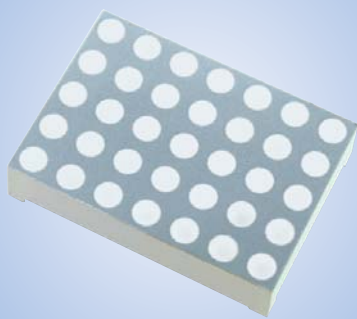
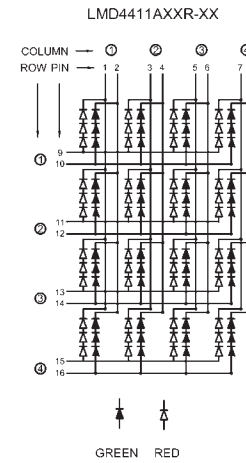
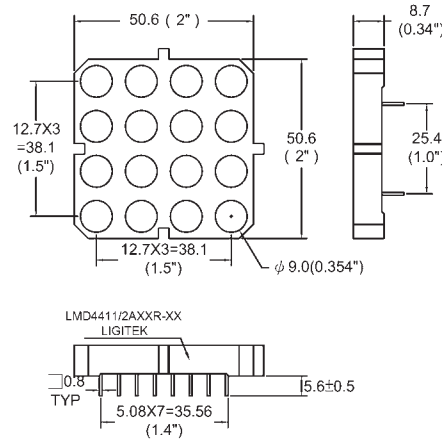
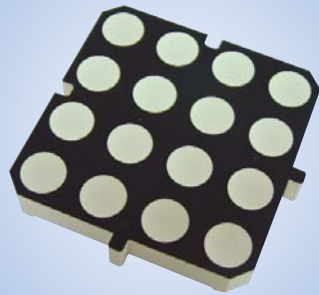
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
L5D5052-XX	GaP	Green	565	1.7	2.8	2.0	3.5	CC
L5D5054-XX	GaAsP/GaP	Orange	635	1.5	2.8	1.75	2.35	
L5D5062-XX	GaP	Green	565	1.7	2.8	2.0	3.5	CA
L5D5064-XX	GaAsP/GaP	Orange	635	1.7	2.8	1.75	2.35	

LGM-226A-10	AlGaInP	Green	574				4600( $\mu$ cd)	
	AlGaInP	Orange	620				4600( $\mu$ cd)	

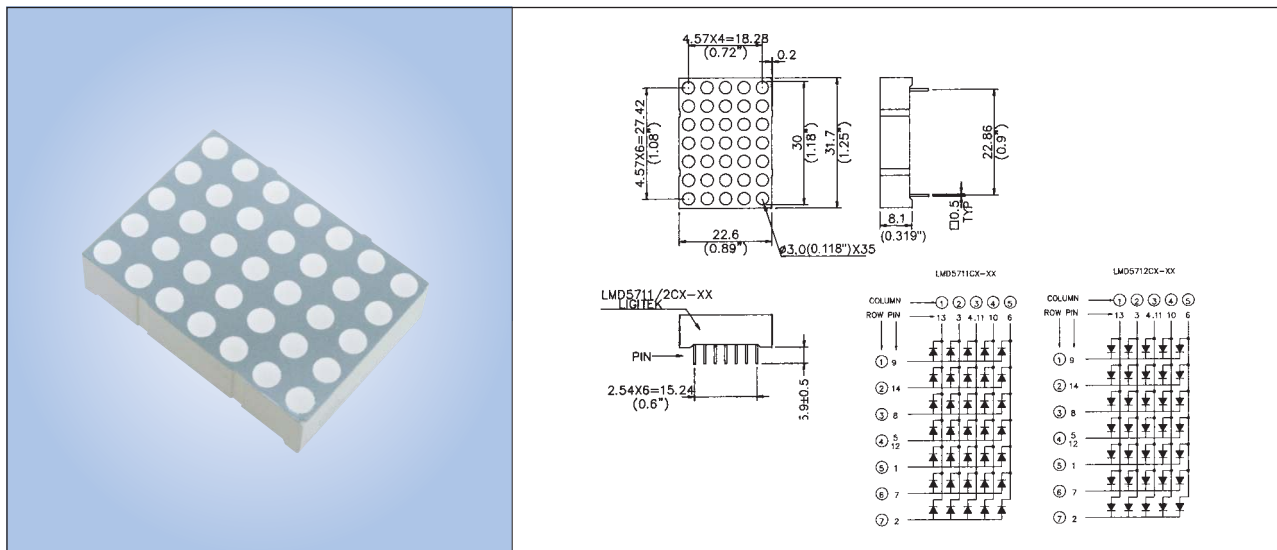
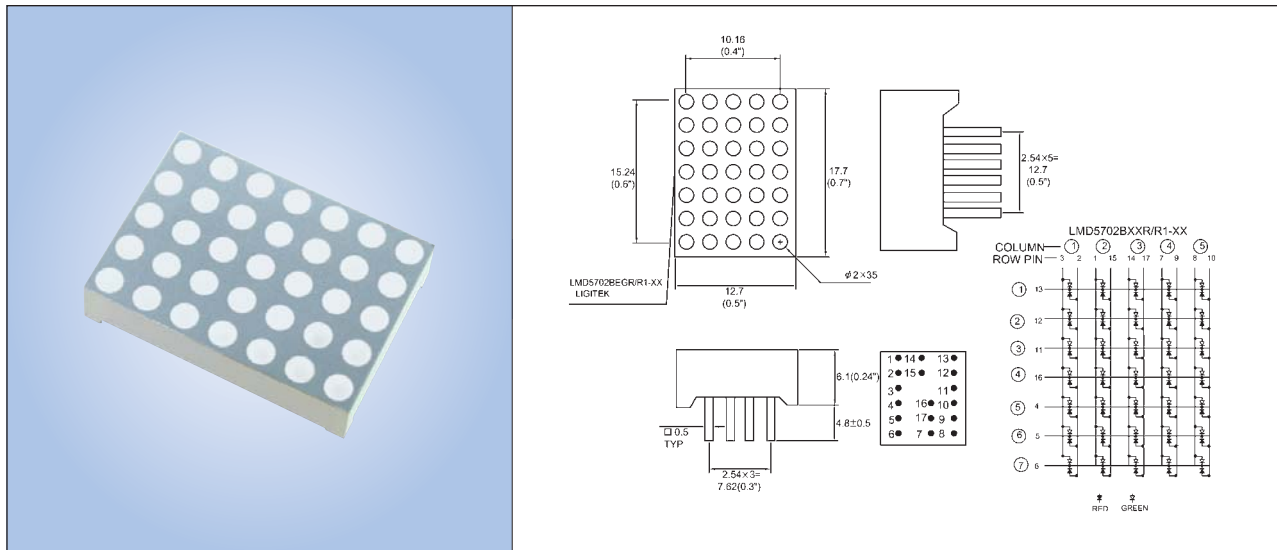
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda_p$ (nm)	Min.	Max.	Min.	Typ.	

LMD4411AEGR-XX	GaAsP/GaP	Hi-Effi.Red	640	5.1	7.8	8	14	CC
	GaP	Green	565	5.1	7.8	15	25	
LMD4412AEGR-XX	GaAsP/GaP	Hi-Effi.Red	640	5.1	7.8	8	14	CA
	GaP	Green	565	5.1	7.8	15	25	

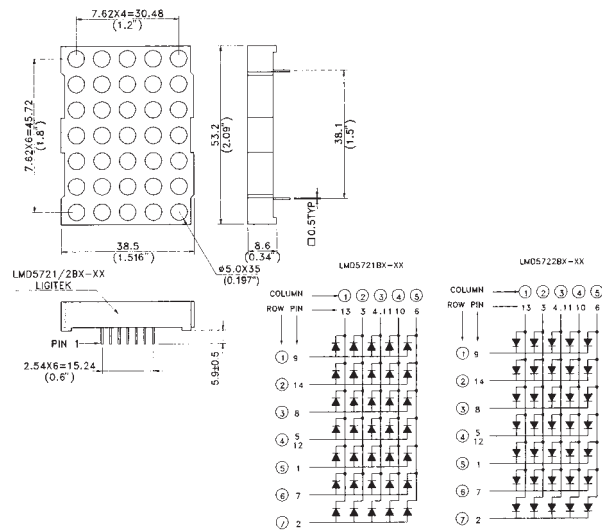
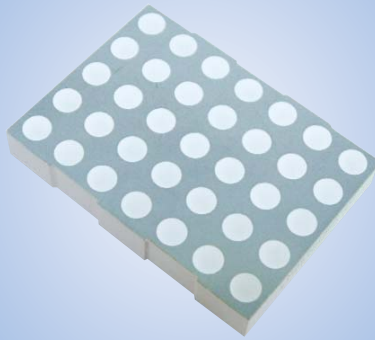
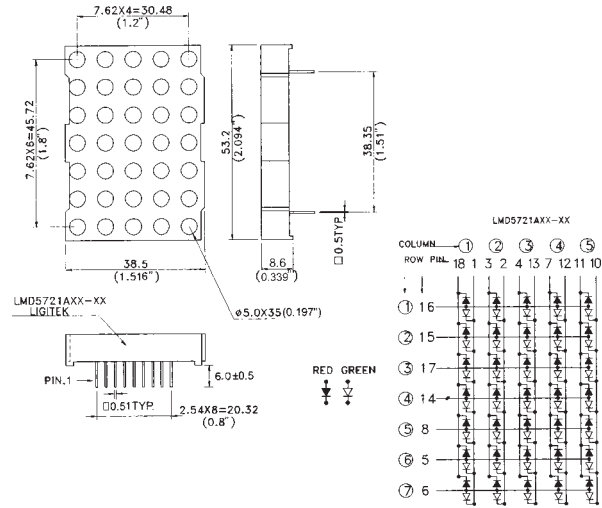
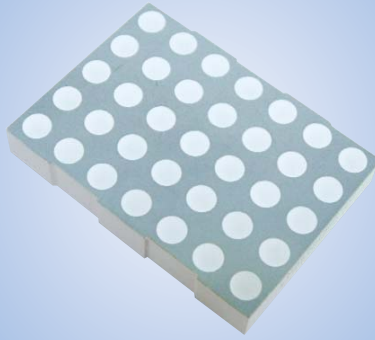
LMD5701AG-XX	GaP	Green	565	1.7	2.6	2.5	4.0	CC
LMD5701AE-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.8	4.5	
LMD5701ASR-XX	GaAlAs	Super Red	660	1.5	2.4	4.0	7.0	
LMD5702AG-XX	GaP	Green	565	1.7	2.6	2.5	4.0	CA
LMD5702AE-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.8	4.5	
LMD5702ASR-XX	GaAlAs	Super Red	660	1.5	2.4	4.0	7.0	

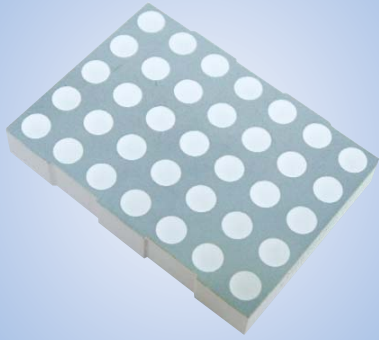
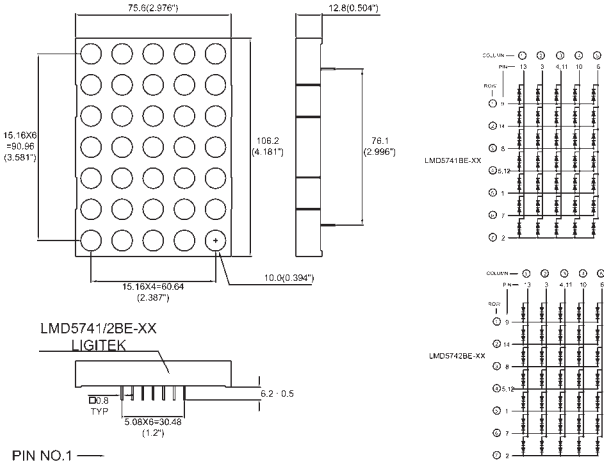


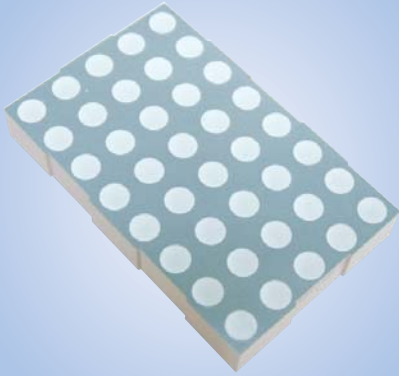
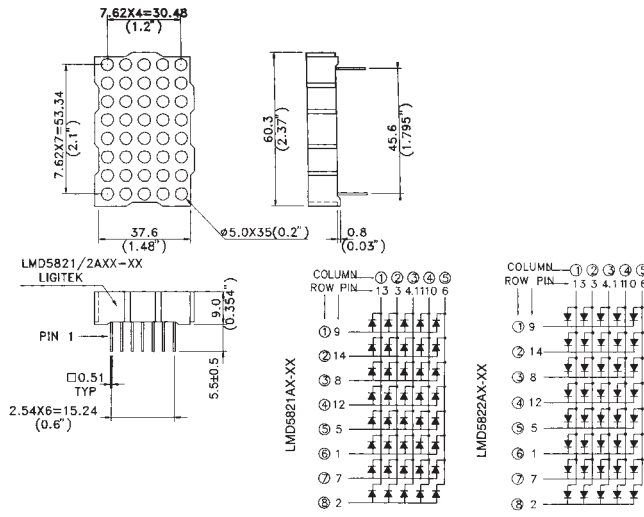
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.	
LMD5702BEGR/R1-XX	GaAsP/GaP	Hi-Effi.Red	640	1.7	2.6	3.05	5.0	CA
	GaP	Green	565	1.7	2.6	5.0	8.5	
LMD5711CG-XX LMD5711CE-XX LMD5711CSR-XX LMD5712CG-XX LMD5712CE-XX LMD5712CSR-XX	GaP	Green	565	1.7	2.6	2.5	4.2	CC
	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.5	4.5	
	GaAlAs	Super Red	660	1.5	2.4	6.0	10	
	GaP	Green	565	1.7	2.6	2.5	4.2	CA
	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.5	4.5	
	GaAlAs	Super Red	660	1.5	2.4	6.0	10	



Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda_p$ (nm)	Min.	Max.	Min.	Typ.	
LMD5721AEGR-XX	GaAsP/GaP	Hi-Effi.Red	640	1.7	2.6	4	7	CC
	GaP	Green	565	1.7	2.6	5	9	
LMD5721BG-XX	GaP	Green	565	1.7	2.6	5.0	9.0	CC
LMD5721BE-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	4.0	7.0	
LMD5721BSR-XX	GaAlAs	Super Red	660	1.5	2.4	7.0	12	
LMD5722BG-XX	GaP	Green	565	1.7	2.6	5.0	9.0	CA
LMD5722BE-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	4.0	7.0	
LMD5722BSR-XX	GaAlAs	Super Red	660	1.5	2.4	7.0	12	



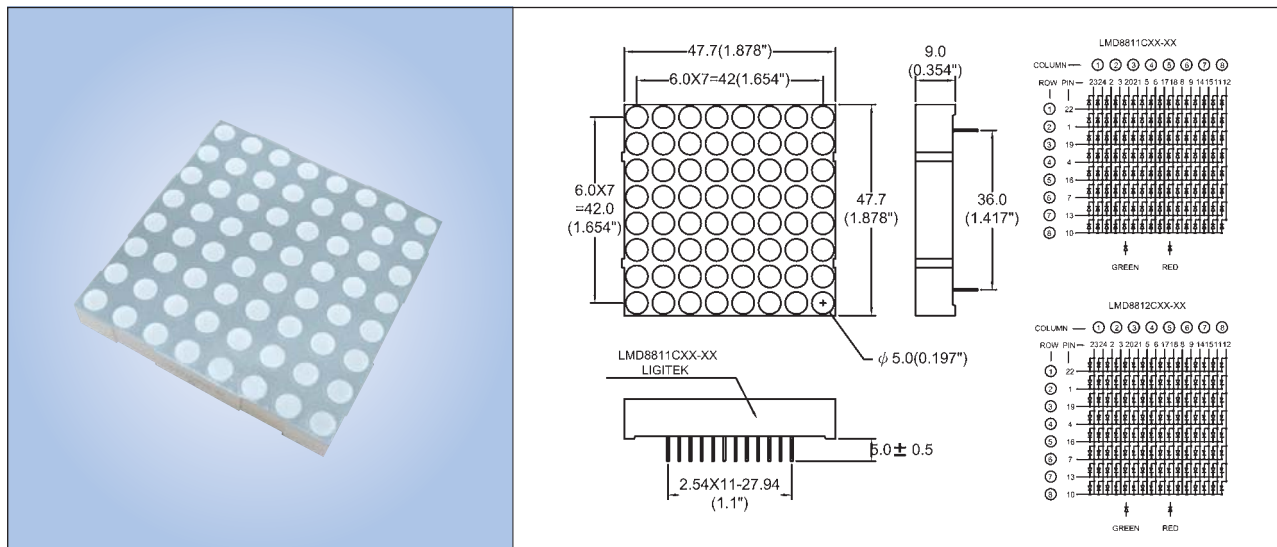
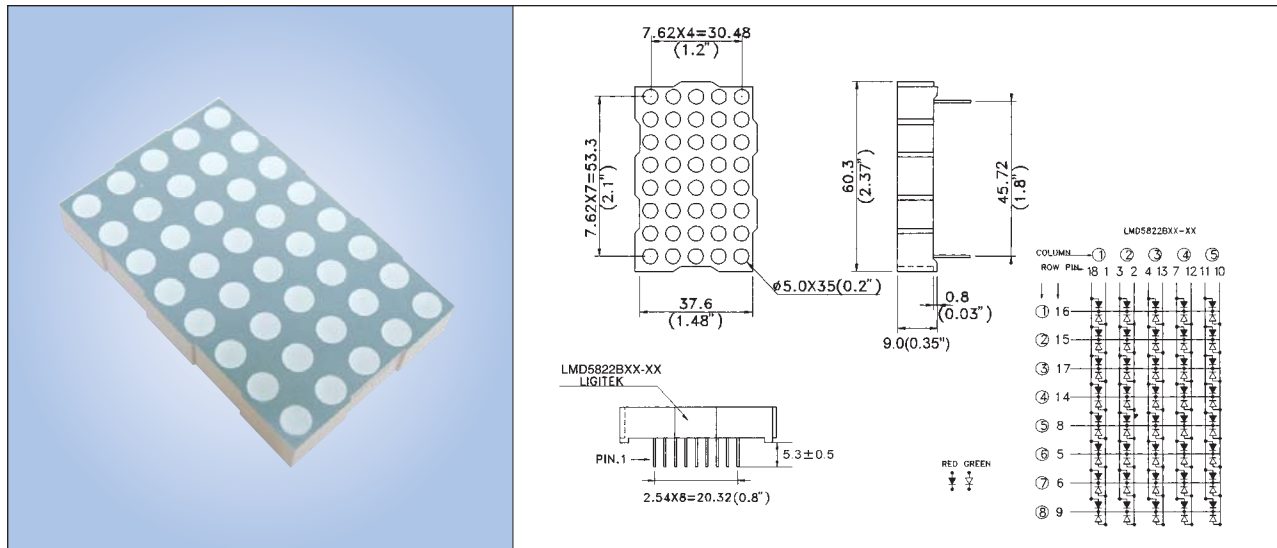
Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
								
								
LMD5741BG-XX	GaP	Green	565	3.4	5.2	6.0	10	<b>CC</b>
LMD5741BGV-XX	GaP	Hi-Effi.Green	565	3.4	5.2	7.2	12.8	
LMD5741BE-XX	GaAsP/GaP	Hi-Effi.Red	635	3.4	5.2	7.2	12	
LMD5741BSR-XX	GaAIAs	Super Red	660	3.0	4.8	15.25	25	

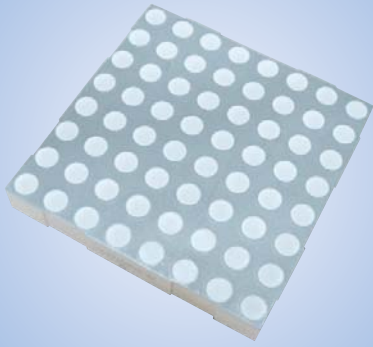
								
								
LMD5821ASR-XX	GaAIAs	Super Red	660	1.5	2.4	7.0	12	<b>CC</b>
LMD5821AVG-XX	GaP	Hi-Effi.Green	565	1.7	2.8	6.0	10	
LMD5822ASR-XX	GaAIAs	Super Red	660	1.5	2.4	7.0	12	<b>CA</b>
LMD5822AVG-XX	GaP	Hi-Effi.Green	565	1.7	2.8	6.0	10	

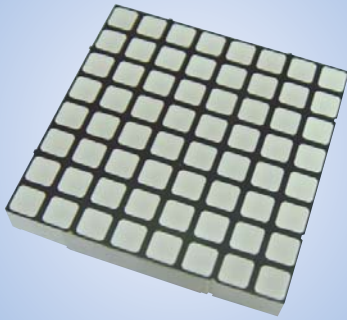


Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA
	Material	Emitted Color	$\lambda$ (nm)	Min.	Max.	Min.	Typ.	
LMD5821BEGR-XX	GaAsP/GaP	Hi-Effi.Red	640	1.7	2.8	1.75	3.05	CC
	GaP	Green	565	1.7	2.8	3.05	5	
LMD5822BSRVG-XX	GaAlAs	Super Red	660	1.5	2.4	6.1	10.5	CA
	GaP	Hi-Effi.Green	565	1.7	2.8	4	7.2	

LMD8811CEGR-XX	GaAsP/GaP	Orange	640	1.7	2.8	2.0	3.5	CC
	GaP	Green	565	1.7	2.8	2.7	4.5	
LMD8811CSRVG-XX	GaAlAs	Red	660	1.5	2.4	4.8	8.0	CC
	GaP	Green	565	1.7	2.8	3.6	6.0	
LMD8812CEGR-XX	GaAsP/GaP	Orange	640	1.7	2.8	2.0	3.5	CA
	GaP	Green	565	1.7	2.8	2.7	4.5	
LMD8812CSRVG-XX	GaAlAs	Red	660	1.5	2.4	4.8	8.0	CA
	GaP	Green	565	1.7	2.8	3.6	6.0	



Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		CC or CA	
	Material	Emitted Color	$\lambda$ p(nm)	Min.	Max.	Min.	Typ.		
									
	LMD8821AG-XX	GaP	Green	565	1.7	2.6	3.05	6.1	CC
	LMD8821AE-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	3.05	5	
	LMD8821ASR-XX	GaAIAs	Super Red	660	1.5	2.4	6.1	12	
	LMD8822AG-XX	GaP	Green	565	1.7	2.6	3.05	6.1	CA
	LMD8822AE-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	3.05	5	
LMD8822ASR-XX	GaAIAs	Super Red	660	1.5	2.4	6.1	12		

								
	LMD8821BEGR-XX	GaAsP/GaP	Hi-Effi.Red	640	1.7	2.6	4.0	6.1
LMD8821BEGR-XX	GaP	Green	565	1.7	2.6	5.0	7.2	CA
	LMD8822BEGR-XX	GaAsP/GaP	Hi-Effi.Red	640	1.7	2.6	4.0	
LMD8822BEGR-XX	GaP	Green	565	1.7	2.6	5.0	7.2	

Part No.	Chip			Vf(v) @20mA		Iv(mcd) @10mA		
	Material	Emitted Color	$\lambda_p$ (nm)	Min.	Max.	Min.	Typ.	
	LBD1011-XX	GaP	Red	697	1.7	2.6	0.5	0.9
	LBD1012-XX	GaP	Green	565	1.7	2.6	2.5	4.0
	LBD1013-XX	GaAsP/GaP	Yellow	585	1.7	2.6	2.0	3.0
LBD1014-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	2.8	4.5	

	LBD5112-XX	GaP	Green	565	1.7	2.6	3.5	6.0
	LBD5113-XX	GaAsP/GaP	Yellow	585	1.7	2.6	2.5	4.0
	LBD5114-XX	GaAsP/GaP	Hi-Effi.Red	635	1.7	2.6	3.5	6.0
	LBD5115-XX	GaAlAs	Red	660	1.56	2.4	5.0	8.0

## Brightness Code For LED Displays

Group	Luminous Intensity( $\mu$ cd) at 10mA	
	MIN	MAX
C	200	350
D	350	500
E	500	800
F	800	1000
G	1000	1350
H	1350	1750
I	1750	2350
K	2350	3050
L	3050	4000
M	4000	5000
N	5000	6100
O	6100	7200
P	7200	8500
Q	8500	10500
R	10500	12800
S	12800	15250
T	15250	18000
U	18000	21500
V	21500	26000
W	26000	31000
X	31000	37000
Y	37000	43000
Z	43000	50000
Z1	50000	58000
Z2	58000	68000
Z3	68000	78500
Z4	78500	91000
Z5	91000	145000
Z6	145000	175000
Z7	175000	210000

## Color Code

Group	Wave length(nm) at 10mA		Group	Wave length(nm) at 10mA	
	MIN	MAX		MIN	MAX
OJ	447	450	3	560	562
OI	450	453	4	562	564
OH	453	456	5	564	566
OG	456	459	6	566	568
OF	459	462	7	568	570
OE	462	465	8	570	572
OD	465	468	9	572	574
OC	468	471	10	574	576
OB	471	474	11	576	578
OA	474	477	12	578	580
1A	477	480	13	580	583
1B	480	483	14	583	585
1C	483	486	15	585	587
1D	486	489	16	587	589
1E	489	492	17	589	592
1F	492	495	18	592	595
1G	495	498	19	595	598
1H	498	501	20	598	600
1I	501	504	21	600	603
1J	504	507	22	603	606
1K	507	510	23	606	609
1L	510	513	24	609	612
1M	513	516	25	612	615
1N	516	519	26	615	618
1O	519	522	27	618	621
1P	522	525	28	621	624
1Q	525	528	29	624	627
1R	528	531	30	627	630
1S	531	534	31	630	633
1T	534	537	32	633	636
1U	537	540	33	636	639
1V	540	543	34	639	642
1W	543	546	35	642	645
1X	546	549	36	645	648
1Y	549	552	37	648	651
1Z	552	555	38	651	654
1	555	558	39	654	657
2	558	560	40	657	660



# Custom Design

