



BASED LED LAMPS (INCANDESCENT LAMP REPLACEMENT)

Kingbright Part Number	Emitted Color	Peak Wave- Length (nm)	Iv (mcd)		Fig. No.
			Min.	Max.	
BLF041SRC-12V-P	Red	660	400	1600	14
BLF041SYC-12V-P	Yellow	595	400	1600	
BLF051URC-12V-P	Red	660	1500	3000	15
BLF051SYC-12V-P	Yellow	595	400	2000	
BLB101URC-12V-P	Red	660	1500	3000	16
BLB101SYC-12V-P	Yellow	595	700	2500	
BLS101URC-12V-P	Red	660	1500	3000	17
BLS101SYC-12V-P	Yellow	595	700	2500	

Notes:

1. Various colors and lens type are also available.
2. All incandescent lamps replacement are available in 6V, 12V, 24V.

LED DISPLAYS

Shape	Kingbright Part No.	Emitted Color	Peak Wave- Length (nm)	Iv (ucd) @10mA	
				Min.	Max.
10 Seg. 	DC10EWA	Red	625	2200	5600
	DC10GWA	Green	565	2200	5600
	DC10YWA	Yellow	590	2200	5600
	DC10SRWA	Red	660	5600	31000
	DC7G3HWA	Gm/Red	565/700	2200/900	5600/2200
0.3" 	SA03-11EWA	Red	625	2200	9000
	SA03-11GWA	Green	565	1400	5600
	SA03-11YWA	Yellow	590	1400	5600
	SA03-11SRWA	Red	660	5600	14000
0.4" 	SA04-11EWA	Red	625	2200	9000
	SA04-11GWA	Green	565	9000	21000
	SA04-11YWA	Yellow	590	1400	5600
	SA04-11SRWA	Red	660	9000	30000
0.56" 	SA56-21EWA	Red	625	2200	5600
	SA56-21GWA	Green	565	5600	14000
	SA56-21YWA	Yellow	590	2200	5600
	SA56-21SRWA	Red	660	5600	21000
1.0" 	SA10-21EWA	Red	625	5600	14000
	SA10-21GWA	Green	565	9000	22000
	SA10-21YWA	Yellow	590	3600	9000
	SA10-21SRWA	Red	660	14000	31000
0.4" 	DA04-11EWA	Red	625	2200	5600
	DA04-11GWA	Green	565	2200	3600
	DA04-11YWA	Yellow	590	2200	5600
	DA04-11SRWA	Red	660	3600	9000
0.56" 	DA56-11EWA	Red	625	2200	5600
	DA56-11GWA	Green	565	2200	5600
	DA56-11YWA	Yellow	590	2200	5600
	DA56-11SRWA	Red	660	5600	21000

Notes:

1. All displays are available in both common anode and common cathode.
2. Bi-color, other face color and various dimensions are also available.

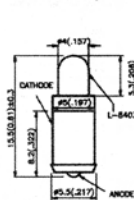


Fig. 14

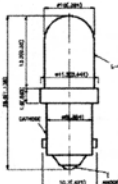


Fig. 16

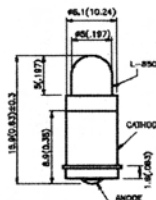


Fig. 15

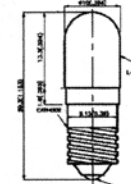


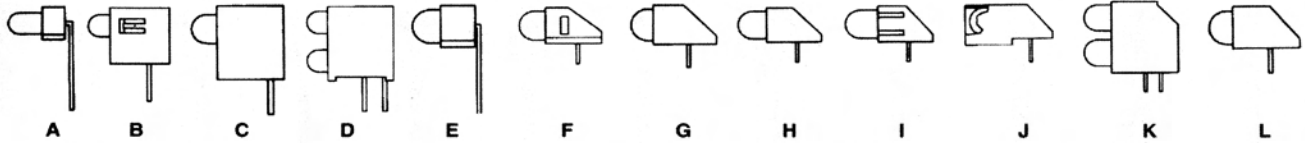
Fig. 17

Shape	Kingbright Part No.	Emitted Color	Peak Wave- Length (nm)	Iv (ucd) @10mA	
				Min.	Max.
0.56" 	BA56-11EWA	Red	625	2200	9000
	BA56-11GWA	Green	565	3600	5600
	BA56-11YWA	Yellow	590	2200	5600
	BA56-11SRWA	Red	660	5600	21000
0.5" 	PSA05-11EWA	Red	625	2200	5600
	PSA05-11GWA	Green	565	2200	5600
	PSA05-11YWA	Yellow	590	2200	5600
	PSA05-11SRWA	Red	660	5600	21000
0.54" 	PDA54-11EWA	Red	625	1400	5600
	PDA54-11GWA	Green	565	1400	3600
	PDA54-11YWA	Yellow	590	1400	3600
	PDA54-11SRWA	Red	660	3600	14000
0.7" 5x7 	TA07-11EWA	Red	625	2200	5600
	TA07-11GWA	Green	565	2200	5600
	TA07-11YWA	Yellow	590	2200	5600
	TA07-11SRWA	Red	660	5600	14000
1.2" 8x8 	TA12-11EWA	Red	625	3600	9000
	TA12-11GWA	Green	565	2200	5600
	TA12-11YWA	Yellow	590	2200	5600
	TA12-11SRWA	Red	660	5600	14000
1.5" 8x8 	TA15-11EWA	Red	625	3600	9000
	TA15-11GWA	Green	565	2200	5600
	TA15-11YWA	Yellow	590	2200	5600
	TA15-11SRWA	Red	660	5600	14000
2.0" 5x7 	TA20-11EWA	Red	625	3600	9000
	TA20-11GWA	Green	565	2200	5600
	TA20-11YWA	Yellow	590	2200	5600
	TA20-11SRWA	Red	660	9000	31000
2.3" 8x8 	TA23-11EWA	Red	625	3600	9000
	TA23-11GWA	Green	565	2200	5600
	TA23-11YWA	Yellow	590	2200	5600
	TA23-11SRWA	Red	660	14000	31000

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P I L O T L I G H T S & I N D I C A T O R S

PRINTED CIRCUIT BOARD LED INDICATORS

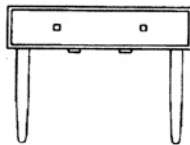


Hot Tinned Pins. Diffused LED Lenses.

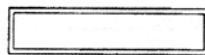
Mfr. No.	Color	λ_p (nm)	If (mA)	Vf (TYP)	Iv at /mA
T-3 All Epoxy PCB Indicator (Fig. A)					
SSF-LX3P74ID-99	Red	635	5-25	2.2	14/20
SSF-LX3P74GD-99	Green	565	5-25	2.2	12/20
SSF-LX3P74YD-99	Yellow	585	5-25	2.2	12/20
SSF-LX3P74SRD-99	S. Red	660	5-25	1.7	60/20
SSF-LX3P74SRC-99	S. Red	660	5-25	1.7	170/20
T-3 Snap-On Holder PCB Indicator (Fig. B)					
SSF-LXH304ID	Red	635	5-25	2.2	14/20
SSF-LXH304GD	Green	565	5-25	2.2	12/20
SSF-LXH304YD	Yellow	585	5-25	2.2	12/20
SSF-LXH304SRD	S. Red	660	5-25	1.7	60/20
T-3 Snap-On Holder PCB Indicator Low Current Version (Fig. B)					
SSF-LXH304LID	Red	635	2-25	1.8	2.0/2
SSF-LXH304LGD	Green	565	2-25	1.8	1.0/2
SSF-LXH304LYD	Yellow	585	2-25	1.8	1.0/2
T-3 Popular Low Cost PCB Indicator (Fig. C)					
SSF-LXH103ID	Red	635	5-25	2.2	14/20
SSF-LXH103GD	Green	565	5-25	2.2	12/20
SSF-LXH103YD	Yellow	585	5-25	2.2	12/20
T-3 Dual LED Tower PCB Indicator (Fig. D)					
SSF-LXH240IID	Red	635	5-25	2.2	14/20
SSF-LXH240GGD	Green	565	5-25	2.2	12/20
SSF-LXH240YYD	Yellow	585	5-25	2.2	12/20
T-5 All Epoxy Low Cost PCB Indicator (Fig. E)					
SSF-LX453ID-99	Red	635	5-25	2.2	25/20
SSF-LX453GD-99	Green	565	5-25	2.2	20/20
SSF-LX453YD-99	Yellow	585	5-25	2.2	20/20
SSF-LX453SRD-99	S. Red	660	5-25	1.7	70/20
T-5 Low Current PCB Indicator (Fig. F)					
SSF-LXH104LID	Red	635	2-5	1.8	3/2
SSF-LXH104LGD	Green	565	2-5	1.8	2/2
SSF-LXH104LYD	Yellow	585	2-5	1.8	2/2
SSF-LXH104SRD	S. Red	660	2-5	1.6	10/2

Mfr. No.	Color	λ_p (nm)	If (mA)	Vf (TYP)	Iv at /mA
T-5 Bi-Color PCB Indicator (Fig. F)					
SSF-LXH104IGW	Red/Grn.	635/565	5-25	2.2	20/20
SSF-LXH104YGW	Yel./Grn.	585/565	5-25	2.2	20/20
T-5 Standard PCB Indicator (Fig. G)					
SSF-LXH100ID	Red	635	5-25	2.2	30/20
SSF-LXH100GD	Green	565	5-25	2.2	20/20
SSF-LXH100YD	Yellow	585	5-25	2.2	20/20
T-5 Standard Long Protrusion PCB LED (Fig. H)					
SSF-LXH100ID-01	Red	635	5-25	2.2	30/20
SSF-LXH100GD-01	Green	565	5-25	2.2	20/20
SSF-LXH100YD-01	Yellow	585	5-25	2.2	20/20
SSF-LXH100SRD-01	S. Red	660	5-25	1.7	100/20
T-5 mm Mating PCB Indicator (Fig. I)					
SSF-LXH100MID	Red	635	5-25	2.2	15/20
SSF-LXH100MGD	Green	565	5-25	2.2	12/20
SSF-LXH100MYD	Yellow	585	5-25	2.2	12/20
SSF-LXH100MSRD	S. Red	660	5-25	1.7	70/20
T-5 Shrouded PCB Indicator (Fig. J)					
SSF-LXH1071ID	Red	635	5-25	2.2	30/20
SSF-LXH1071GD	Green	565	5-25	2.2	20/20
SSF-LXH1071YD	Yellow	585	5-25	2.2	20/20
SSF-LXH1071SRD	S. Red	660	5-25	1.7	120/20
T-5 Dual Tower PCB Indicator (Fig. K)					
SSF-LXH250IID	Red	635	5-25	2.2	15/20
SSF-LXH250GGD	Green	565	5-25	2.2	12/20
SSF-LXH250YYD	Yellow	585	5-25	2.2	12/20
SSF-LXH250SRD	S. Red	660	5-25	1.7	70/20
T-5 Quad Ranch PCB Indicator (Fig. L)					
SSF-LXH400ID	Red	635	5-25	2.2	15/20
SSF-LXH400GD	Green	565	5-25	2.2	12/20
SSF-LXH400YD	Yellow	585	5-25	2.2	12/20
SSF-LXH400SRD	S. Red	660	5-25	1.7	70/20

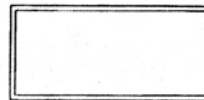
MULTI-CHIP LIGHT BARS



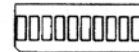
A



B



C



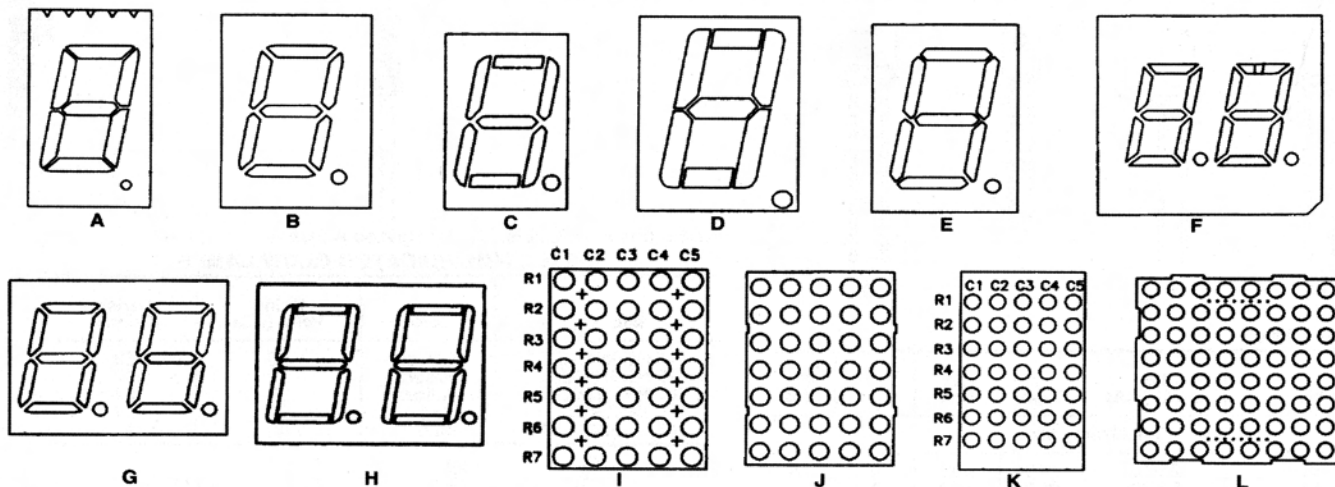
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Chip on Board Reliability.

Mfr. No.	Color	Viewing Angle	Iv mA	λ_p (nm)	Fig.
Dual Chip Side Looking—Edge Lighting, 2 Chips, Clear Lens					
SSB-LX02IC	Red	160°	16/20	635	A
SSB-LX02GC	Green	160°	16/20	565	A
SSB-LX02YC	Yellow	160°	16/20	585	A
SSB-LX02SRC	S. Red	160°	60/20	660	A
5 x 20 Four Chip (8 Pins) Bar, 4 Chips, Diffused Lens					
SSB-LX2350IW	Red	160°	50/20	635	B
SSB-LX2550SGW	Green	160°	50/20	565	B
SSB-LX2450YW	Yellow	160°	50/20	585	B
SSB-LXB100SRW	S. Red	160°	80/20	660	B

Mfr. No.	Color	Viewing Angle	Iv mA	λ_p (nm)	Fig.
10 x 20 Eight Chip (16 Pins) Bar, 8 Chips, Diffused Lens					
SSB-2685IW	Red	160°	80/20	635	C
SSB-LX2885SGW	Green	160°	80/20	565	C
SSB-LX2785YW	Yellow	160°	70/20	585	C
SSB-LX100SRW	S. Red	160°	100/20	660	C
10 x 25 Ten Chip (20 Pins) Bar, 10 Segments, 10 Chips, Diffused Lens					
SSA-LXB10IW	Red	160°	20/20	635	D
SSA-LXB10GW	Green	160°	15/20	565	D
SSA-LSB10YW	Yellow	160°	15/20	585	D
SSA-LXB10SRW	S. Red	160°	60/20	660	D

LED DOT MATRIX DISPLAYS



Common Anode or Cathode. High Contrast Grey Face with Milky White Segments in Off Condition.

Mfr. No.	Color	λ_p (nm)	Iv 10 (mA)	Comm. Pin
.36" (9.1 mm) Single Digit (Fig. A)				
LDS-C324RI	Red	635	3.6	-
LDS-A324RI	Red	635	3.6	+
LDS-C322RI	Green	565	3.6	-
LDS-A322RI	Green	565	3.6	+
.50" (12.7 mm) Single Digit (Fig. B)				
LDS-C504RI	Red	635	5.2	-
LDS-A504RI	Red	635	5.2	+
LDS-C502RI	Green	565	5.2	-
LDS-A502RI	Green	565	5.2	+
.56" (14.2 mm) Single Digit (Fig. C)				
LDS-C514RI	Red	635	5.6	-
LDS-A514RI	Red	635	5.6	+
LDS-C512RI	Green	565	5.6	-
LDS-A512RI	Green	565	5.6	+
.8" (20.3 mm) Single Digit (Fig. D)				
LDS-C854RI	Red	635	6.0	-
LDS-A854RI	Red	635	6.0	+
LDS-C852RI	Green	565	6.0	-
LDS-A852RI	Green	565	6.0	+
1.0" (25.4 mm) Single Digit (Fig. E)				
LDS-CA14RI	Red	635	8.0	-
LDS-AA14RI	Red	635	8.0	+
LDS-CA12RI	Green	565	6.0	-
LDS-AA12RI	Green	565	6.0	+
.3" (7.6 mm) Dual Digit (Fig. F)				
LDD-E304NI	Red	635	4.0	+
LDD-F304NI	Red	635	4.0	-
LDD-E302NI	Green	565	4.0	+
LDD-F302NI	Green	565	4.0	-

Mfr. No.	Color	λ_p (nm)	Iv 10 (mA)	Comm. Pin
.56" (14.2 mm) Dual Digit (Fig. H)				
LDD-C514RI	Red	635	5.0	-
LDD-A514RI	Red	635	5.0	+
LDD-C512RI	Green	565	5.0	-
LDD-A512RI	Green	565	5.0	+
.80" (20.3 mm) Dual Digit (Fig. G)				
LDD-C814RI	Red	635	6.0	-
LDD-A814RI	Red	635	6.0	+
LDD-C812RI	Green	565	6.0	-
LDD-A812RI	Green	565	6.0	+
.7" (18.8 mm) 5 x 7 Dot Matrix (Fig. I)				
LDM-07457NI	Red	635	4.0	-
LDM-07457MI	Red	635	4.0	+
LDM-07257NI	Green	565	4.0	-
LDM-07257MI	Green	565	4.0	+
1.2" (30.0 mm) 5 x 7 Dot Matrix (Fig. J)				
LDM-12457NI	Red	635	4.0	-
LDM-12457MI	Red	635	4.0	+
LDM-12257NI	Green	565	4.0	-
LDM-12257MI	Green	565	4.0	+
1.5" (37 mm) 5 x 7 Dot Matrix (Fig. K)				
LDM-15457NI	RED	635	6.0	-
LDM-15457MI	Red	635	6.0	+
LDM-15257NI	Green	565	6.0	-
LDM-15257MI	Green	565	6.0	+
2.3" (53.3 mm) 8 x 8 Dot Matrix (Fig. L)				
LDM-20488NI	Red	635	7.0	-
LDM-20488MI	Red	635	7.0	+
LDM-20288NI	Green	565	6.0	-
LDM-20288MI	Green	565	6.0	+

PHOTORESISTORS



Photo Resistive/Conductive/ (CdS) Cells are bipolar semiconductor elements that change resistance as a function of illumination. Compact, high drop power dissipation, epoxy coated low profile cell.

Applications: Exposure meters, dimmer switches, display dimmers, flame detectors in oil burner, street lamp switching and opto-couplers. **Temperature Range:** -25°C to +75°C. **Max. Power:** 125 mW.

Mfr. No.	Peak Response Wavelength (nm) λ_{pk}	Resistance K Ohms		Min. Dark Resistance After 2 sec. Min. M Ohms	Max. Voltage Rating (Peak AC) VAC	Measurement Volts
		Min.	Max.			
OED-PCC-9P5-3	550	3	11	0.1	100	10
OED-PCC-9P5-2	550	11	27	0.5	100	10
OED-PCC-9P5-1L	550	25	60	2.0	100	10
OED-PCC-9P51H	550	50	94	3.0	100	10
OED-PCC-9P5-0	550	60	140	5.0	100	10
OED-PCC-9P5-A	550	50	130	10.0	250	35
OED-PCC-9P5-B	550	110	220	10.0	250	35
OED-PCC-9P5-C	550	200	350	10.0	250	35

Character Modules

Standard Operating Temp 0~50°C

Standard Storage Temp -20~70°C

Includes LED Backlight

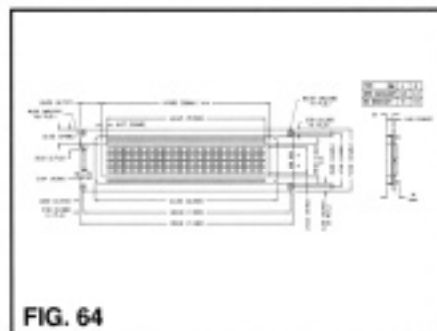
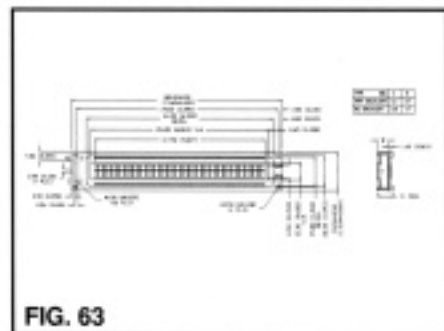
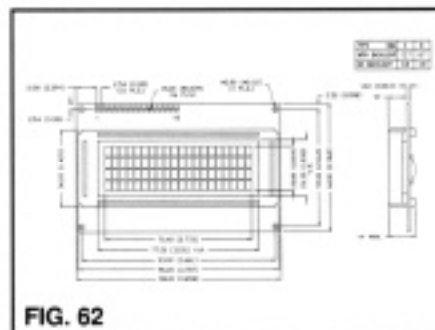
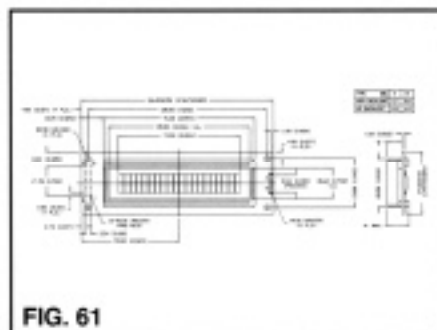
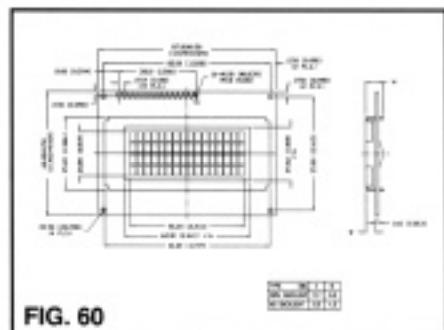
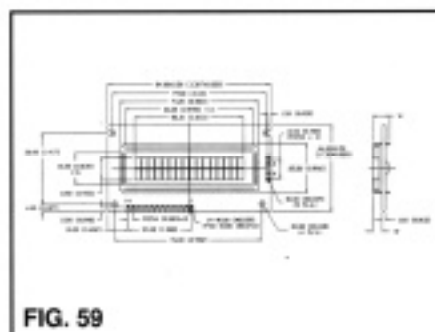
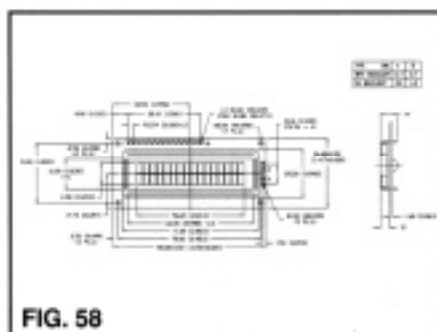
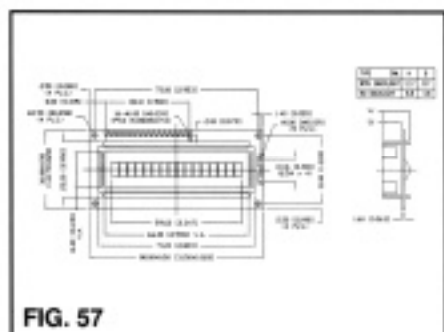
Driving Method is STN Transflective

View Angle is 6:00

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Lumex Part Number	Overall Size w/Backlight	Viewing Area	Character Size	Pixel Size	Fig.
LCM-S01601DSF	80.00 x 36.00 x 12.70	66.00 x 16.00	3.07 x 6.56	0.55 x 0.75	57
LCM-S01602DSF/A	80.00 x 36.00 x 12.70	66.00 x 16.00	2.96 x 5.56	0.56 x 0.66	58
LCM-S01602DSF/B	84.00 x 44.00 x 12.70	66.00 x 16.00	2.96 x 5.56	0.56 x 0.66	59
LCM-S01604DSF	87.00 x 60.00 x 12.70	62.00 x 25.60	2.95 x 4.75	0.55 x 0.55	60
LCM-S02002DSF	116.00 x 37.00 x 12.70	85.00 x 18.60	3.20 x 5.55	0.60 x 0.65	61
LCM-S02004DSF	98.00 x 60.00 x 12.70	77.00 x 26.30	2.95 x 4.75	0.55 x 0.55	62
LDM-S04002DSF	182.00 x 33.50 x 12.70	154.00 x 15.30	3.20 x 5.55	0.60 x 0.65	63
LDM-S04004DSF	190.00 x 54.00 x 14.50	149.00 x 29.50	2.78 x 4.89	0.50 x 0.55	64



Graphic Modules

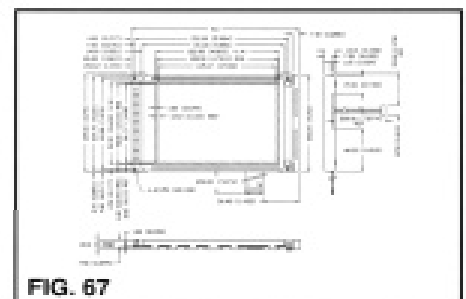
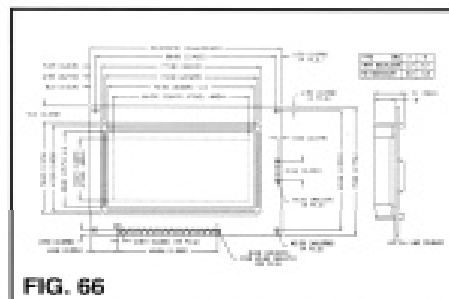
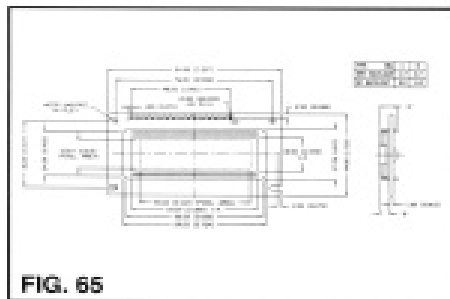
Standard Operating Temp 0~50°C
Standard Storage Temp -20~70°C

Includes LED Backlight
Driving Method is STN Transflective

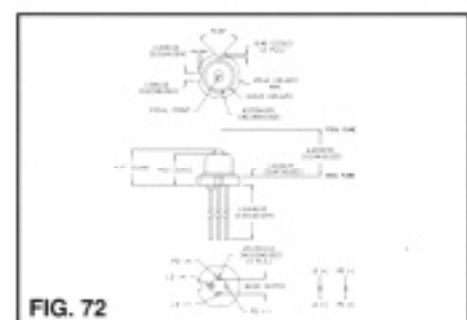
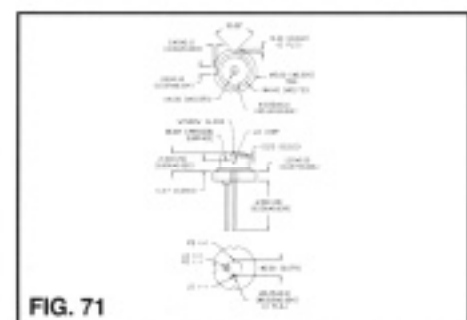
View Angle is 6:00

Lumex Part Number	Overall Size w/Backlight	Viewing Area	Character Size	Pixel Size	Fig.
LCM-S12232GSF	84.00 x 44.00 x 12.70	60.50 x 18.50	122 x 32	0.40 x 0.45	65
LCM-S12864GSF	93.00 x 70.00 x 12.70	72.00 x 40.00	128 x 64	0.48 x 0.48	66
LCM-S320240GWF/B-C*	167.10 x 109.00 x 10.10	122.00 x 92.00	320 x 240	0.33 x 0.33	67

*Fluid Type is PSTN Transflective



Lumex Part Number	Output Power (mW)	Wavelength (Typ λnm)	Current Ith Iop	Operating Voltage (V)	Reverse VRLD	Voltage VRPD	Fig.
Emitters							
OED-LDP65001E	5	650	20 35	2.2	2	30	71
OED-LDH65002E	20	650	25 50	2.2	2	30	71
OED-LDC13001EB	10	1310	12 —	1.2	2	15	72
OED-LDC15001EB	5	1550	8 —	1.2	2	10	72



Lumex Part Number	Reverse Voltage	Forward Current	Active Area Dia	Detection Range (Typ)	Responsivity	Cutoff Frequency	Rise /Fall Time	Fig.
Detectors								
OED-PPD11075G-B	25(V)	2(mA)	75(μm)	1310(nm)	0.90(A/W)	2.0(GHz)	0.2(ns)	73

