

REV.	ECN NO.	REVISIONS	DRN.	CKD.	APP.	DATE
A	---	NEW RELEASE	YIS	YC	NO	12-3-02
B	---	ADDED P/N: 551-1602-816 551-4002-817, 551-4202-818	YIS	JMC	NO	5-21-03
C	---	ADDED P/N 551-1702-819. ADDED WHITE LED SPEC. CORRECTED LED COLOR LISTS IN THE TABLE.	YIS			

PART NUMBER	COLOR	DIMENSION "A"	DIMENSION "B"
551-1602-816	YELLOW	.020 SQ.	.043
551-1702-819	RED	.018 X .016	.040
551-4002-817	BLUE	.020 SQ.	.043
551-4102-815	WHITE	.020 SQ.	.043
551-4202-818	GREEN	.018 X .016	.040

NOTES:

- LEADS TO BE FREE OF DEFORMATION AFTER BENDING AND CUTTING.
- LAMP MUST BE SEATED ALL THE WAY DOWN INTO HOUSING. BENDS MUST BE TIGHT, NO LONGITUDINAL TRAVEL ALONG AXIS ALLOWED.
- ATTENTION: THIS PART IS ELECTROSTATIC SENSITIVE. IT REQUIRES OBSERVING PRECAUTION FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES. FOR EYE SAFETY, DO NOT STARE DIRECTLY INTO THE LIGHT BEAM OF THESE LED DEVICES AT CLOSE RANGE.
- DIALIGHT PART NUMBER : 551-1602-816
551-1702-819
551-4002-817
551-4102-815
551-4202-818

OPERATING CHARACTERISTICS AT 25°C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	BLUE	110	160		mc d	I _r = 20 mA
FORWARD VOLTAGE	BLUE	3.8	4.0		V	I _r = 20 mA
REVERSE CURRENT	BLUE		10		μA	V _r = 5 V
PEAK WAVELENGTH	BLUE	461			nm	I _r = 20 mA
DOMINANT WAVELENGTH	BLUE	470			nm	I _r = 20 mA
VIEWING ANGLE 2 θ 1/2	BLUE	45			DEG.	

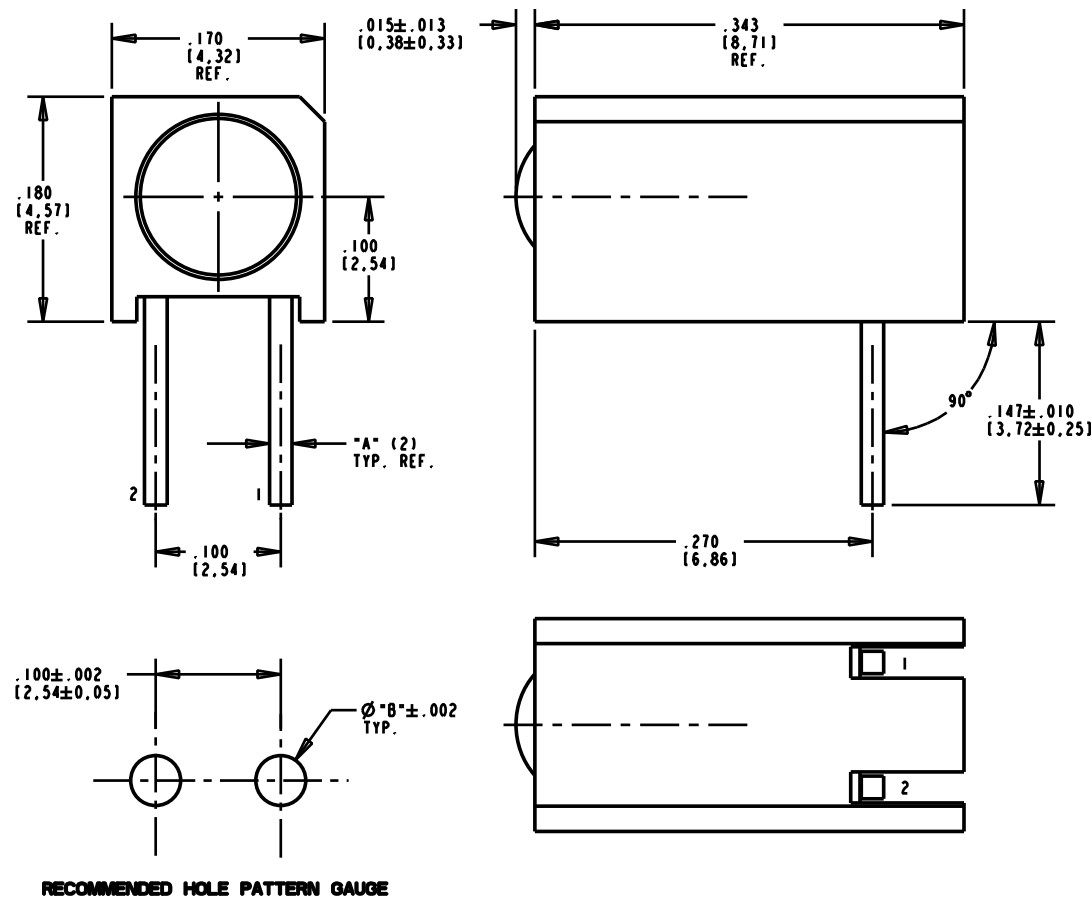
OPERATING CHARACTERISTICS AT 25°C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	GREEN	380	470		mc d	I _r = 20 mA
FORWARD VOLTAGE	GREEN	3.6	4.2		V	I _r = 20 mA
REVERSE CURRENT	GREEN		10		μA	V _r = 5 V
PEAK WAVELENGTH	GREEN	522			nm	I _r = 20 mA
DOMINANT WAVELENGTH	GREEN	525			nm	I _r = 20 mA
VIEWING ANGLE 2 θ 1/2	GREEN	50			DEG.	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT		
	BLUE	UNITS
POWER DISSIPATION	140	mW
FORWARD DC CURRENT	30	mA
PEAK FORWARD CURRENT	100	mA
LINEAR DERATION FROM 55°C	0.7	mA/°C
REVERSE VOLTAGE @ I _r = 10 μA	5	V
DIP-DRAG SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-20 TO +80	°C
STORAGE TEMPERATURE	-35 TO +85	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT		
	GREEN	UNITS
POWER DISSIPATION	133	mW
FORWARD DC CURRENT	30	mA
PEAK FORWARD CURRENT	100	mA
LINEAR DERATION FROM 55°C	0.7	mA/°C
REVERSE VOLTAGE @ I _r = 10 μA	5	V
DIP-DRAG SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-20 TO +80	°C
STORAGE TEMPERATURE	-35 TO +85	°C

OPERATING CHARACTERISTICS AT 25°C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	WHITE	345	500		mc d	I _r = 20 mA
FORWARD VOLTAGE	WHITE	3.8	4.0		V	I _r = 20 mA
REVERSE CURRENT	WHITE		10		μA	V _r = 5 V
COLOR COORDINATES	WHITE	X	.330	.330	.290	.290
		Y	.365	.320	.260	.306
VIEWING ANGLE 2 θ 1/2	WHITE	50			DEG.	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT		
	WHITE	UNITS
POWER DISSIPATION	120	mW
FORWARD DC CURRENT	30	mA
PEAK FORWARD CURRENT	100	mA
LINEAR DERATION FROM 55°C	0.7	mA/°C
REVERSE VOLTAGE @ I _r = 10 μA	5	V
DIP-DRAG SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-40 TO +80	°C
STORAGE TEMPERATURE	-40 TO +100	°C

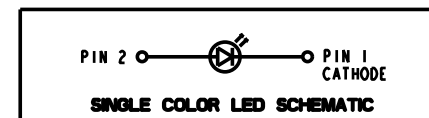


OPERATING CHARACTERISTICS AT 25°C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	100	300		mc d	I _r = 20 mA
FORWARD VOLTAGE	RED	2.0	2.4		V	I _r = 20 mA
REVERSE CURRENT	RED		100		μA	V _r = 5 V
PEAK WAVELENGTH	RED	632			nm	I _r = 20 mA
DOMINANT WAVELENGTH	RED	624			nm	I _r = 20 mA
VIEWING ANGLE 2 θ 1/2	RED	45			DEG.	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT		
	RED	UNITS
POWER DISSIPATION	120	mW
CONTINUOUS FORWARD CURRENT	50	mA
PEAK FORWARD CURRENT	160	mA
LINEAR DERATION FROM 50°C	0.6	mA/°C
REVERSE VOLTAGE	5	V
LEAD SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-55 TO +100	°C

OPERATING CHARACTERISTICS AT 25°C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	YELLOW	106	320		mc d	I _r = 20 mA
FORWARD VOLTAGE	YELLOW	2.0	2.4		V	I _r = 20 mA
REVERSE CURRENT	YELLOW		100		μA	V _r = 5 V
PEAK WAVELENGTH	YELLOW	595			nm	I _r = 20 mA
DOMINANT WAVELENGTH	YELLOW	592			nm	I _r = 20 mA
VIEWING ANGLE 2 θ 1/2	YELLOW	56			DEG.	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT		
	YELLOW	UNITS
POWER DISSIPATION	75	mW
CONTINUOUS FORWARD CURRENT	30	mA
PEAK FORWARD CURRENT	60	mA
LINEAR DERATION FROM 50°C	0.4	mA/°C
REVERSE VOLTAGE	5	V
LEAD SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-55 TO +100	°C



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SCALE: 10.000	DRAWING NUMBER	REV
ALL DIM'S IN: INCHES (MM)	C-17014	C
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE	
FRACTIONS: ±1/64	3mm LED CB1	
DECIMALS (.XXX): ±.01	MATERIAL	
DECIMALS (.XXXX): ±.005	N/A	
DECIMALS (.XXXXX): ±.0005	FINISH	
ANGLES: ±1°	N/A	
FSCN 83330	Dialight	1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727
	SHEET OF	FAMILY TABLES: