

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

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	N.O.	5-21-03
C		ADDED P/N 551-1702-819. ADDED WHITE LED SPEC, CORRECTED LED COLOR LISTS IN TABLE.	YIS	JMC	N.O.	8-6-03
D		UPDATED WHITE LED SPECS	KLJ	2,8, NY		2-7-08

OPERATING CHARACTERISTICS AT 25 °C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	BLUE	110	160		mc d	I _f = 20 mA
FORWARD VOLTAGE	BLUE		3.8	4.0	V	I _f = 20 mA
REVERSE CURRENT	BLUE			10	µA	V _r = 5 V
PEAK WAVELENGTH	BLUE		461		nm	I _f = 20 mA
DOMINANT WAVELENGTH	BLUE		470		nm	I _f = 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 _f = 20 mA
FORWARD VOLTAGE	GREEN		3.6	4.2	V	I _f = 20 mA
REVERSE CURRENT	GREEN			10	µA	V _r = 5 V
PEAK WAVELENGTH	GREEN		522		nm	I _f = 20 mA
DOMINANT WAVELENGTH	GREEN		525		nm	I _f = 20 mA
VIEWING ANGLE 2 θ 1/2	GREEN		50		DEG.	

COLOR BIN LIMIT SPECIFICATIONS OF WHITE LED					
BIN		CHROMATICITY COORDINATES			
1	x	0.330	0.330	0.356	0.361
	y	0.360	0.318	0.351	0.385
2	x	0.287	0.296	0.330	0.330
	y	0.295	0.276	0.318	0.339
3	x	0.264	0.280	0.296	0.283
	y	0.267	0.248	0.276	0.305
4	x	0.283	0.287	0.330	0.330
	y	0.305	0.295	0.339	0.360

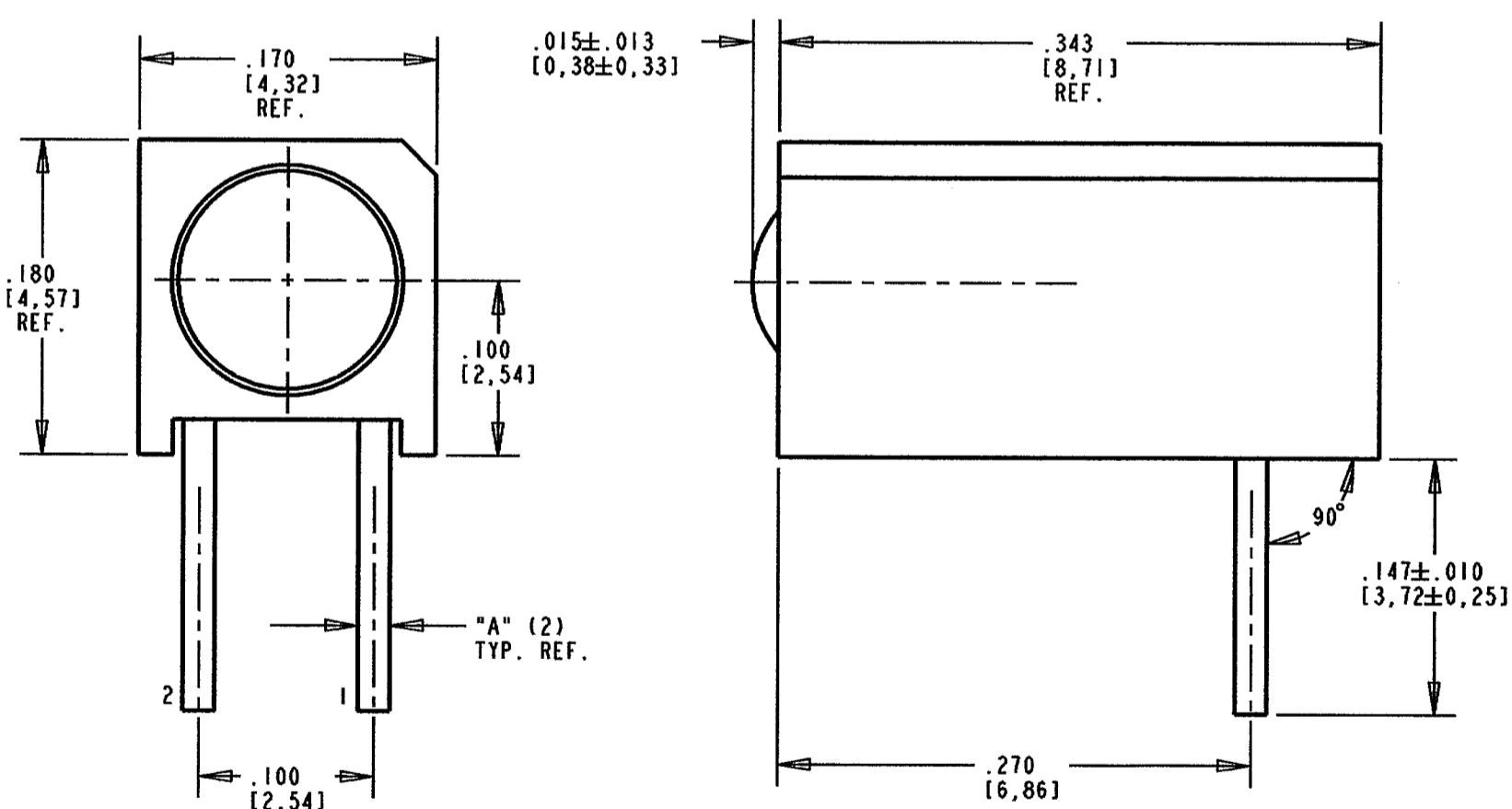
TOLERANCE FOR EACH COLOR BIN LIMIT IS ±0.01.

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	1150		2500	mc d	I _f = 20 mA
FORWARD VOLTAGE	WHITE		3.2	3.7	V	I _f = 20 mA
REVERSE CURRENT	WHITE		10		µA	V _r = 5 V
VIEWING ANGLE 2 θ 1/2	WHITE		45		DEG.	

ABSOLUTE MAXIMUM RATINGS AT 25 °C AMBIENT		
	WHITE	UNITS
POWER DISSIPATION	111	mW
FORWARD DC CURRENT	30	mA
PEAK FORWARD CURRENT	100	mA
LINEAR DERATION FROM 37 °C	0.42	mA/°C
REVERSE VOLTAGE @ I _r = 10 µA	5	V
DIP-DRAG SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-40 TO +85	°C
STORAGE TEMPERATURE	-40 TO +100	°C

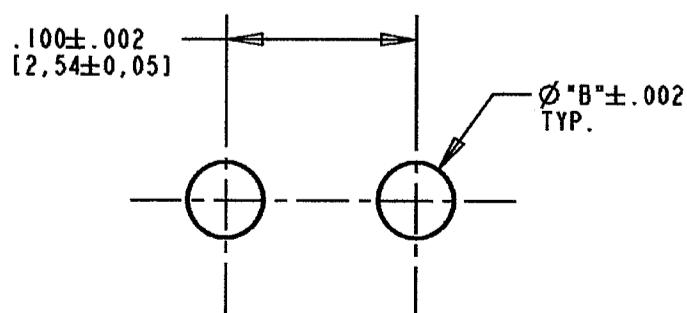


OPERATING CHARACTERISTICS AT 25 °C AMBIENT						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	100	300		mc d	I _f = 20 mA
FORWARD VOLTAGE	RED		2.0	2.4	V	I _f = 20 mA
REVERSE CURRENT	RED			100	µA	V _r = 5 V
PEAK WAVELENGTH	RED		632		nm	I _f = 20 mA
DOMINANT WAVELENGTH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

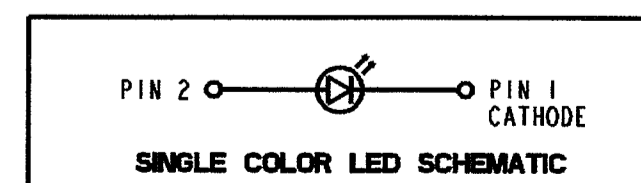
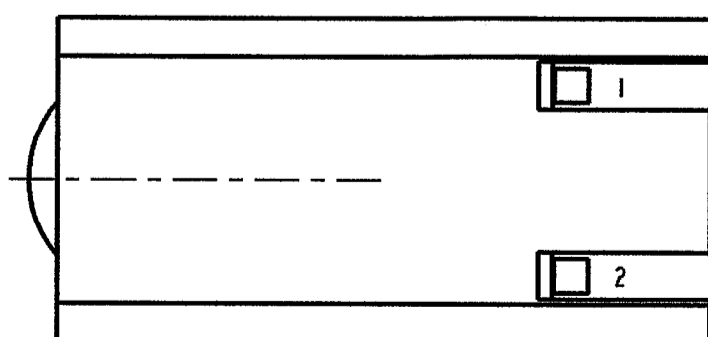
ABSOLUTE MAXIMUM RATINGS AT 25 °C AMBIENT		
	RED	UNITS
POWER DISSIPATION	120	mW
CONTINUOUS FORWARD CURRENT	50	mA
PEAK FORWARD CURRENT	160	mA
LINEAR DERATION FROM 50 °C	0.6	mA/°C
REVERSE VOLTAGE	5	V
LEAD SOLDER TEMPERATURE FOR 5 SEC.	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-55 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 _f = 20 mA
FORWARD VOLTAGE	YELLOW		2.0	2.4	V	I _f = 20 mA
REVERSE CURRENT	YELLOW			100	µA	V _r = 5 V
PEAK WAVELENGTH	YELLOW		595		nm	I _f = 20 mA
DOMINANT WAVELENGTH	YELLOW		592		nm	I _f = 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



RECOMMENDED HOLE PATTERN GAUGE



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SCALE: 10.000	DRAWING NUMBER	REV
ALL DIM'S IN: INCHES (MM)	C-17014	D
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE	
FRACTIONS: ±1/64	Ø3mm LED CB1	
DECIMALS (.XXX): ±.01	MATERIAL	
DECIMALS (.XXXX): ±.005	N/A	
ANGLES: ±1°	FINISH:	
N/A	Dialight	
FSCM 83330	1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727	
SHEET 1 OF 1 FAMILY TABLE:		