



**THE DATASHEET OF**  
**51281-0598**



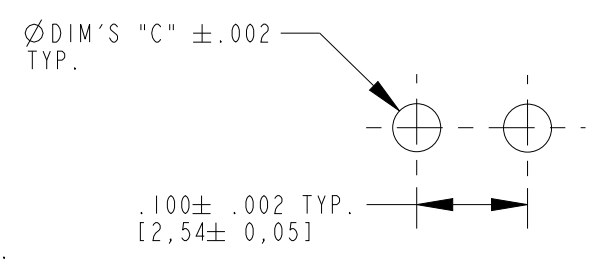
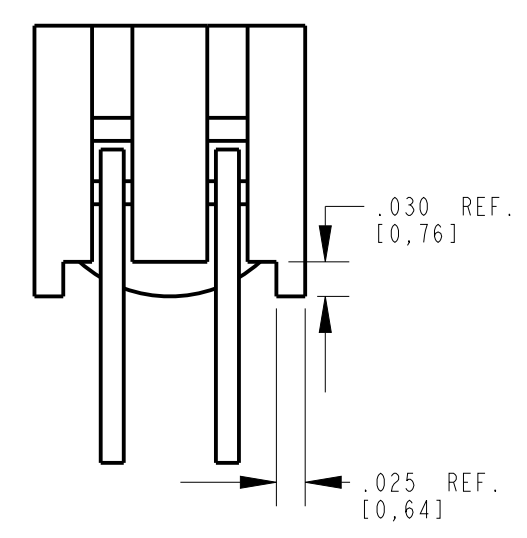
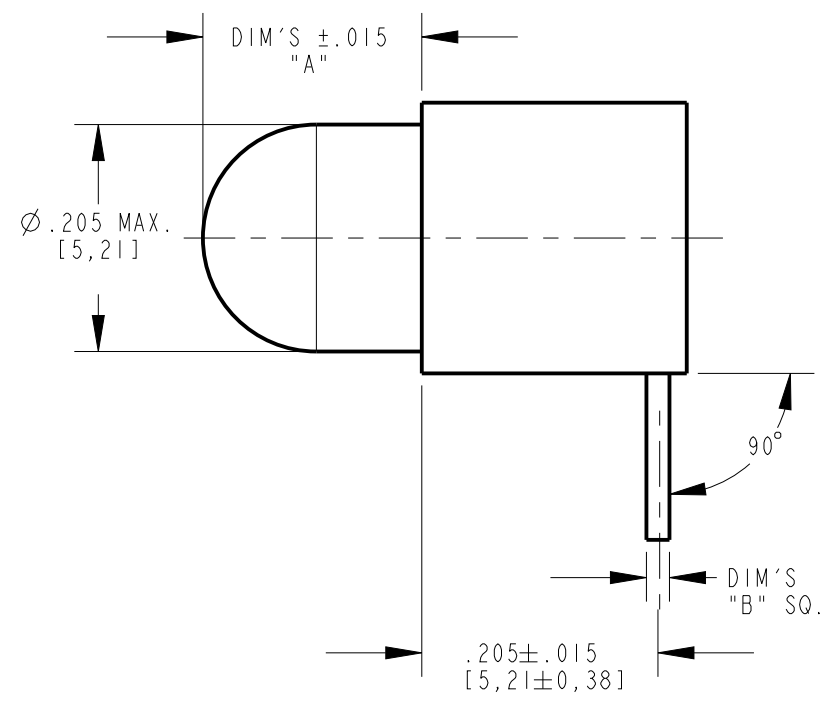
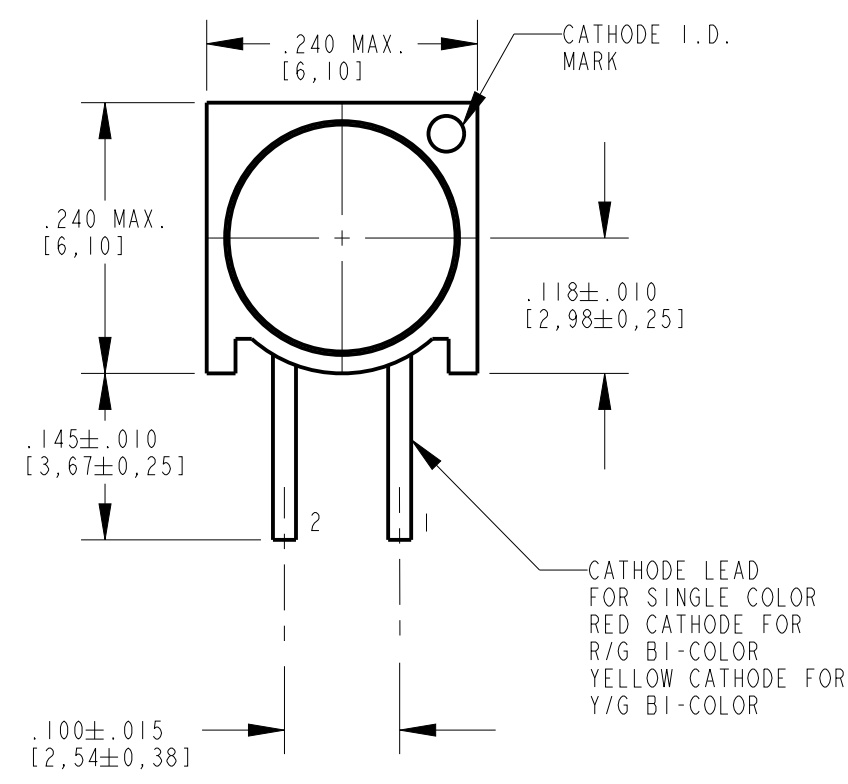
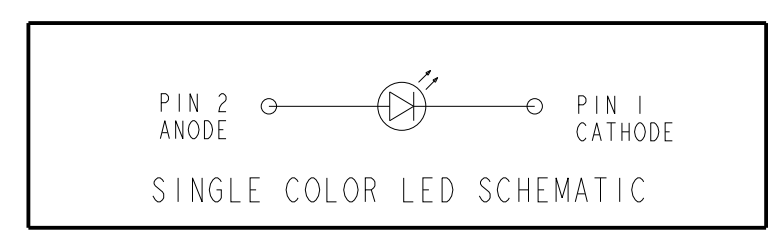
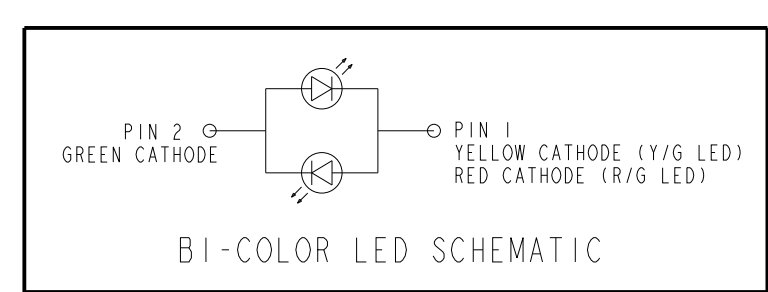
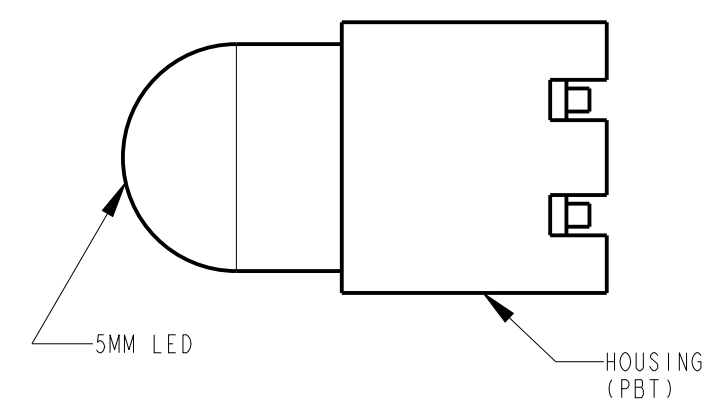
ASSEMBLY NUMBER	LED COLOR	DIMENSIONS			LED OPERATING CHARACTERISTICS AT 25°C AMBIENT								ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT							
					PEAK WAVELENGTH (nm) TYP	DOMINANT WAVELENGTH (nm) TYP	VIEWING ANGLE (°)	LUMINOUS INTENSITY (mcd)				FORWARD VOLTAGE (V)			REVERSE CURRENT (mA)	POWER DISSIPATION (mW)	CONTINUOUS FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (mA)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)
								TEST CONDITION	MIN	TYP	MAX	TEST CONDITION	TYP	MAX						
550-0205F	GREEN DIFFUSED	.135	.020	.043	565	570	60	10 mA	25	60	90	20 mA	2.1	2.6	100 @ VF=5V	100	30	90	-55 TO +100	-55 TO +100
550-0305F	YELLOW DIFFUSED	.135	.020	.043	585	588	60	10 mA	3.7	12.6		20 mA	2.1	2.6	100 @ VF=5V	60	20	80	-55 TO +100	-55 TO +100
550-0405F	RED DIFFUSED	.135	.020	.043	635	625	60	10 mA	19	60		20 mA	2.0	2.6	100 @ VF=5V	100	30	120	-55 TO +100	-55 TO +100
550-0505F	RED DIFFUSED 5 VOLT	.197	.025	.050	635		60	5v	2.1						100 @ VF=5V				-40 TO +85	-40 TO +100
550-0705F	GREEN DIFFUSED 5 VOLT	.197	.025	.050	565		60	5v		1.8					100 @ VF=5V				-20 TO +85	-40 TO +100
550-0805F	YELLOW DIFFUSED 5 VOLT	.197	.025	.050	583		60	5v	2.0	8.0					100 @ VF=5V				-40 TO +85	-55 TO +100
550-1005F	BLUE WATER CLEAR	.197	.020	.043	468	470	30	20 mA	680	1150	1900	20 mA	3.5	3.8	100 @ VF=5V	120	30	100	-40 TO +85	-50 TO +100
550-1105F	RED TINTED DIFFUSED 2mA	.197	.018	.040	632		60	2 mA	3.7			2 mA	2.0	2.4	10 @ VF=5V	48	20	60	-40 TO +85	-40 TO +100
550-1205F	YELLOW TINTED DIFFUSED 2mA	.197	.018	.040	589		60	2 mA	3.7			2 mA	2.0	2.4	10 @ VF=5V	48	20	60	-40 TO +85	-40 TO +100
550-1305F	GREEN TINTED DIFFUSED 2mA	.197	.018	.040	575		60	2 mA	1.5		8.7	2 mA	2.0	2.4	10 @ VF=5V	48	20	60	-40 TO +85	-40 TO +100
550-2205F	GREEN DIFFUSED	.190	.020	.043	563		65	10 mA	3.6	10.0			2.1	3.0	10 @ VF=3V	75	25	60	-25 TO +85	-30 TO +100
550-2305F	YELLOW DIFFUSED	.190	.020	.043	585	590	50	10 mA	19	40	100	20 mA	2.1	2.6	100 @ VF=5V	52	20	60	-40 TO +85	-40 TO +100
550-2405F	RED DIFFUSED	.190	.020	.043	650		50	10 mA	2.2	6.3		20 mA	2.2	2.55	10 @ VF=3V	60	20	60	-25 TO +85	-30 TO +100
550-3005F	RED/GREEN BI-COLOR	.190	.020	.043	660/570	638/569	60	20 mA	23		110	20 mA	2.0	2.6		81	30	90	-40 TO +85	-40 TO +100
550-3105F	YELLOW/GREEN BI-COLOR	.190	.020	.043	591/573	571	50	20 mA	11/18	30/50	50/85	20 mA	2.1	2.6		52	20	60	-30 TO +85	-40 TO +100
550-5105F	RED DIFFUSED	.190	.020	.043	635	623	50	10 mA	19	40	90	20 mA	2.1	2.6	100 @ VF=5V	81	30	60	-40 TO +85	-40 TO +100
550-5205F	GREEN TINTED DIFFUSED	.190	.020	.043	569	571	50	10 mA	19	40	90	20 mA	2.2	2.6	100 @ VF=5V	52	20	60	-40 TO +85	-40 TO +100
550-5405F	AMBER TINTED DIFFUSED	.190	.020	.043	610	602	50	10 mA	12.6	40	90	20 mA	2.0	2.6	100 @ VF=5V	60	20	60	-40 TO +85	-40 TO +100
550-5505F	RED NON-DIFFUSED, WATER CLEAR	.197	.018	.040	635		24	20 mA	80	125			2.2	3.0	100 @ VF=5V	135	30	500	-55 TO +100	-55 TO +100
550-5605F	GRN NON-DIFFUSED, WATER CLEAR	.197	.018	.040	565		24	20 mA	80	120			2.3	3.0	100 @ VF=5V	135	30	500	-20 TO +100	-55 TO +100
550-5705F	YEL NON-DIFFUSED, WATER CLEAR	.197	.018	.040	583		24	20 mA	80	140			2.2	3.0	100 @ VF=5V	85	20	500	-55 TO +100	-55 TO +100
550-5805F	AMBR NON-DIFFUSED, WATER CLEAR	.190	.024	.050	611		30	20 mA	240	700			2.05	2.4	100 @ VF=5V	75	30	60	-40 TO +100	-55 TO +100
550-5905F	GRN(InGaN)NON-DIFF.WATER CLEAR	.190	.020	.043	518	527	30	20 mA	2500	4200	7200	20 mA	3.8	4.3	100 @ VF=5V	135	30	100	-40 TO +85	-40 TO +100
550-6005F	WHITE NON-DIFF. WATER CLEAR	.193	.020	.043	SEE TABLE X=.3,Y=.3		30	20 mA	1150	1900	3200	20 mA	3.5		100 @ VF=5V	120	30	100	-40 TO +85	-40 TO +100

REV	REVISIONS	DRN	CKD	APP	DATE
A	NEW RELEASE	TWC	TC	N.O.	7-11-05
B	P/N 550-0205F PEAK WAVELENGTH "565" WAS "560".	KLJ	MES	N.O.	4-16-08
C	UPDATED FOLLOWING SPECIFICATIONS FOR 550-0505F: MIN LUM INT "2.1" WAS "1.0"; MAX IF "15" WAS "20"; PEAK WAVELENGTH "635" WAS "655".	KLJ	NO	MES	5-2-08
D	UPDATED FOLLOWING SPECIFICATIONS FOR 550-5905F: DIM A ".190" WAS ".193"; MIN LUM INT "2500" WAS "1900"; MAX VF "4.3" WAS "4.0"; PEAK WAVELENGTH "518" WAS "524".	AJF	KLJ	NO	6-25-09
E	UPDATED LED SPECS	LD	NO		3-23-22
F	UPDATED LED SPECS	LD	CS		8-16-22
G	UPDATED SPECS OF P/N 550-1105F, 550-1205F & 550-1305F	LD	CS		10-4-23
H	ADDED P/N 550-3005F & 550-3105F	LD	CS		5-22-24
J	ADDED P/N 550-1005F	LD	CS		10-7-25

**RoHS Compliant 550-xx05F Thru Hole Single Square Back CBI**

Part Numbers with the "F" suffix ending are RoHS Compliant.  
 Example: 550-0205F or any 550-XX05F  
 The bag packaging is marked with "RoHS Compliant" label or equivalent markings.  
 Parts can be wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. for 5 sec.

BIN	LIMITS (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



**RECOMMENDED P.C.B. HOLE PATTERN**



**ATTENTION:**  
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

- NOTES:
- LEADS TO FIT INTO HOLE PATTERN AS SHOWN.
  - LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
  - PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PARTS.
  - THIS ASSEMBLY CONTAINS ELECTROSTATIC SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.
  - DIALIGHT PART NUMBER: 550-XX05F.

THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND THE SOLE PROPERTY OF DIALIGHT CORP. REPRODUCTION OF THIS DRAWING OR CONSTRUCTION OF ANY PARTS WITHIN THIS DRAWING ARE FORBIDDEN WITHOUT THE WRITTEN CONSENT OF DIALIGHT CORP.

SCALE: 6:000

DRAWING NUMBER: C-17264

REV: J

TOLERANCES: UNLESS OTHERWISE SPECIFIED

FRACTIONS: ±1/64

DECIMALS (.XX): ±.01

DECIMALS (.XXX): ±.005

DECIMALS (.XXXX): ±.0005

ANGLES: ±1°

FINISH: FSCM 83330

TITLE: 5mm LED CBI, SQ BACK HOUSING

MATERIAL:

**Dialight** 1501 ROUTE 34 SOUTH, FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com

SHEET 1 OF 1 FAMILY TABLES:

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 51281-0598 on WIN SOURCE](#)

 [Molex, LLC Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

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-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management