

DIALIGHT PART NUMBER	LED COLOR	DIM "A"	DIM "B"	DIM "C"	DIM "D"	OPERATING CHARACTERISTICS AT 25°C AMBIENT									
						LUMINOUS INTENSITY TEST CONDITION	LUMINOUS INTENSITY (mcd)			FORWARD VOLTAGE / CURRENT TEST COND		REVERSE CURRENT (μA)	PEAK WAVELENGTH (nm)	VIEWING ANGLE (DEG)	
							MIN	TYP	MAX	TYP	MAX				
551-0207F	GREEN DIFFUSED	.095	.018 x .016	.118±.008	.040	IF = 10mA	5.6	12.6	29	IF = 10mA	2.1 V	2.6 V	100	565	60
551-0307F	YELLOW DIFFUSED	.095	.018 x .016	.118±.008	.040	IF = 10mA	3.7	8.7	30	IF = 10mA	2.1 V	2.6 V	100	585	60
551-0407F	RED DIFFUSED	.095	.018 x .016	.118±.008	.040	IF = 10mA	2.5	8.7	18	IF = 10mA	2.0 V	2.6 V	100	635	60
551-0507F	RED DIFFUSED	.095	.018 x .016	.118±.010	.040	Vf = 5V	8.7	29	—	Vf = 5V	10 mA	20 mA	100	635	60
551-0607F	GREEN DIFFUSED	.095	.018 x .016	.118±.010	.040	Vf = 5V	5.6	19	—	Vf = 5V	10 mA	20 mA	100	565	60
551-0707F	YELLOW DIFFUSED	.095	.018 x .016	.118±.010	.040	Vf = 5V	3.7	12.6	—	Vf = 5V	10 mA	20 mA	100	585	60
551-0807F	BLUE NON-TINTED DIFF	.095	.018 x .016	.118±.010	.040	IF = 10mA	30	—	85	IF = 10mA	3.2 V	3.8 V	100	468	100
551-1107F	RED DIFFUSED	.095	.018 x .016	.118±.010	.040	IF = 2mA	1.0	1.6	—	IF = 2mA	1.7 V	2.2 V	10	635	60
551-1207F	YELLOW DIFFUSED	.095	.018 x .016	.118±.010	.040	IF = 2mA	1.0	1.6	—	IF = 2mA	1.8 V	2.7 V	10	585	60
551-1307F	GREEN DIFFUSED	.095	.018 x .016	.118±.010	.040	IF = 2mA	1.0	1.6	—	IF = 2mA	1.9 V	2.2 V	10	565	60
551-1407F	AlGaAs RED WC	.095	.018 SQ.	.115±.010	.040	IF = 1mA	2	3	—	IF = 1mA	1.6 V	1.8 V	100	645	45
551-1507F	GREEN TINTED NON-DIFF	.095	.018 x .016	.118±.010	.040	IF = 10mA	32	50	—	IF = 20mA	2.1 V	2.8 V	100	565	45
551-1607F	YELLOW TINTED NON-DIFF	.095	.018 x .016	.118±.010	.040	IF = 10mA	10	—	50	IF = 20mA	2.1 V	2.8 V	100	585	45
551-1707F	RED TINTED NON-DIFF	.095	.018 x .016	.118±.010	.040	IF = 10mA	8.7	29	—	IF = 20mA	2.0 V	2.8 V	100	635	45
551-2507F	ORANGE DIFFUSED	.095	.018 SQ.	.115±.010	.040	IF = 10mA	6.0	9.5	16	IF = 10mA	1.9 V	2.4 V	100	600	60
551-5807F	AlInGaP YELLOW WC	.095	.018 x .016	.118±.010	.040	IF = 20mA	180	320	—	IF = 20mA	2.0 V	2.4 V	100	588	56
551-5907F	InGaN GREEN WC	.101	.020 SQ.	.110±.004	.043	IF = 10mA	140	270	400	IF = 10mA	2.5 V	3.0 V	10	518	100
551-6007F	InGaN WHITE	.095	.018 x .016	.118±.010	.040	IF = 20mA	400	1100	1900	IF = 20mA	3.5 V	4.0 V	100	—	—
551-6107F	InGaN BLUE WC	.095	.018 SQ.	.115±.010	.040	IF = 20mA	310	520	880	IF = 20mA	3.3 V	3.8 V	100	468	45

REV	ECN NO	REVISIONS	DRN	CKD	APP	DATE
A	—	NEW RELEASE	TWC	TC	NO	9-22-05
B	—	ADDED P/N 551-2507F	TWC	MES	NO	11-2-05
C	—	ADDED P/N'S 551-5807F, -5907F, -6107F; ADDED LED SCHEMATIC; ADDED NOTES 1, 2, AND 3; ADDED METRIC DIMS, UPDATED SPECS.	KLJ	MES	NO	12-4-08
D	—	UPDATED 551-0807F SPECS	AJF	KLJ	NO	7-28-11
E	—	UPDATE 5510807F AND 5512507F SPECS	JTD	MES	NO	2-21-14
F	—	ADDED 551-6007F & C.COORD.	VP	WFB	NO	7-8-15
G	—	UPDATED DIMENSIONS A,B,C & D FOR P/N 551-0207F/0307F/0407F. ALSO UPDATED LED SPECS FOR THE SAME P/N'S	BP	—	NO	5-23-17

NOTES:

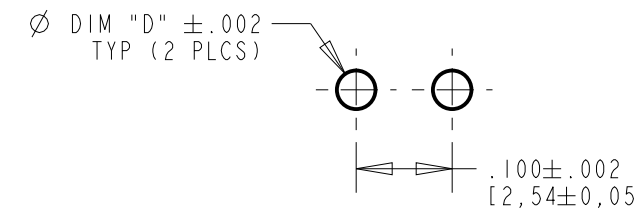
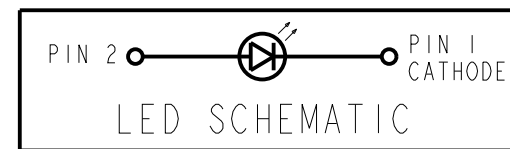
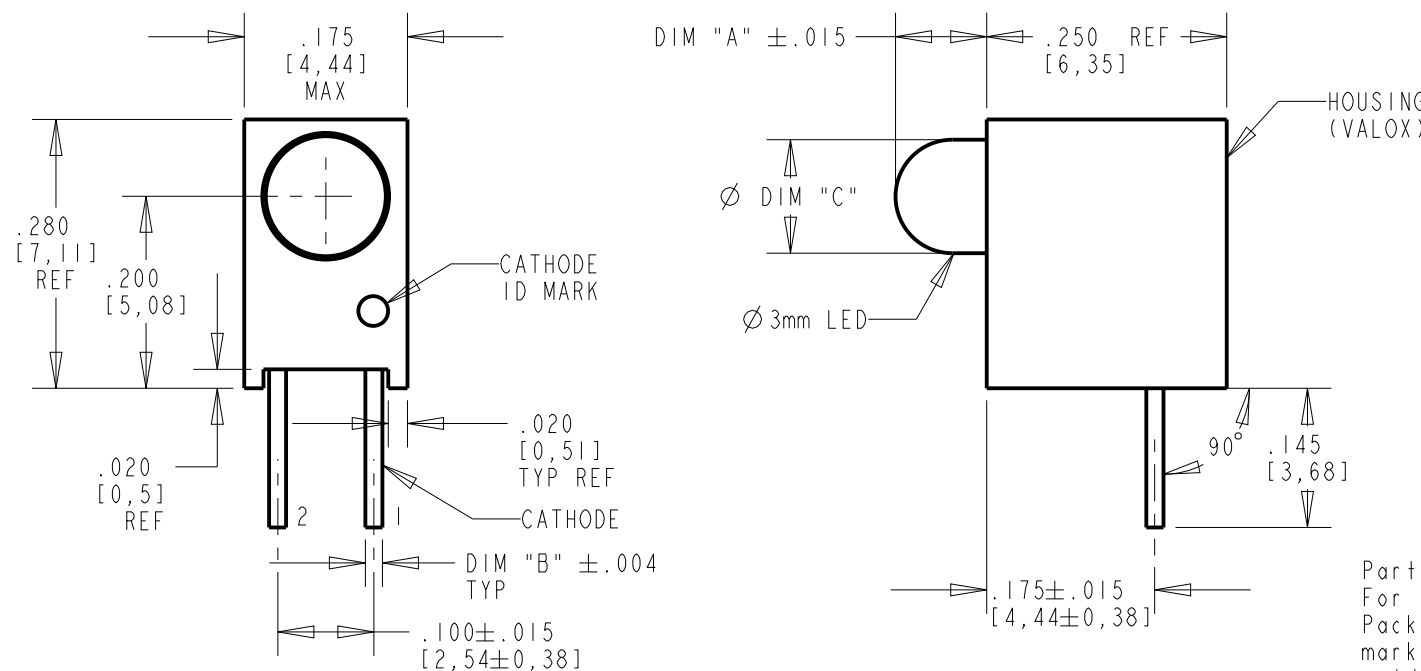
- LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
- LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.
- PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- DIALIGHT PART NUMBERS: 551-XX07F.
- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.

PART NUMBER	ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT								
	POWER DISSIPATION	DC FORWARD VOLTAGE	CONT. FWD CURRENT	PEAK FWD CURRENT	LINEAR DERATION	REVERSE VOLTAGE	SOLDERING TEMP FOR 5 SEC.	OPERATING TEMPERATURE	STORAGE TEMPERATURE
551-0207F	120 mW	—	30 mA	90 mA	0.4 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100 °C	-55°C /+100 °C
551-0307F	60 mW	—	20 mA	60 mA	0.25 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100 °C	-55°C /+100 °C
551-0407F	100 mW	—	30 mA	90 mA	0.4 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100 °C	-55°C /+100 °C
551-0507F	—	7.5 V	—	—	0.086 V/°C FROM 50°C	5 V	260 °C	-40°C /+85 °C	-55°C /+100°C
551-0607F	—	7.5 V	—	—	0.086 V/°C FROM 50°C	5 V	260 °C	-40°C /+85 °C	-55°C /+100°C
551-0707F	—	7.5 V	—	—	0.086 V/°C FROM 50°C	5 V	260 °C	-40°C /+85 °C	-55°C /+100°C
551-0807F	120 mW	—	30 mA	—	0.50 mA/°C FROM 30°C	5 V	260 °C	-40°C /+85°C	-45°C /+100°C
551-1107F	20 mW	—	7 mA	—	0.7 mA/°C FROM 90°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-1207F	20 mW	—	7 mA	—	0.7 mA/°C FROM 90°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-1307F	20 mW	—	7 mA	—	0.7 mA/°C FROM 90°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-1407F	87 mW	—	30 mA	—	0.5 mA/°C FROM 50°C	5 V	260 °C	-20°C /+100°C	-55°C /+100°C
551-1507F	100 mW	—	30 mA	120 mA	0.4 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-1607F	60 mW	—	20 mA	80 mA	0.25 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-1707F	100 mW	—	30 mA	120 mA	0.4 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-2507F	135 mW	—	25 mA	90 mA	0.5 mA/°C FROM 50°C	5 V	260 °C	-55°C /+100°C	-55°C /+100°C
551-5807F	75 mW	—	30 mA	60 mA	0.4 mA/°C FROM 70°C	5 V	260 °C	-40°C /+100°C	-55°C /+100°C
551-5907F	120 mW	—	30 mA	100 mA	—	5 V	260 °C	-40°C /+85°C	-55°C /+100°C
551-6007F	120 mW	—	30 mA	100 mA	—	5 V	260 °C	-40°C /+80 °C	-40°C /+100°C
551-6107F	120 mW	—	30 mA	100 mA	—	5 V	260 °C	-40°C /+85°C	-35°C /+85°C



HUE BIN	CHROMATICITY COORDINATES FOR WHITE WATER CLEAR I <sub>F</sub> = 20 mA				
A3	X	0.270	0.270	0.250	0.250
	Y	0.275	0.325	0.300	0.250
A4	X	0.270	0.250	0.250	0.270
	Y	0.275	0.250	0.200	0.225
B3	X	0.290	0.290	0.270	0.270
	Y	0.300	0.350	0.325	0.275
B4	X	0.290	0.270	0.270	0.290
	Y	0.300	0.275	0.225	0.250
C3	X	0.310	0.310	0.290	0.290
	Y	0.325	0.375	0.350	0.300
C4	X	0.310	0.290	0.290	0.310
	Y	0.325	0.300	0.250	0.275
D3	X	0.330	0.330	0.310	0.310
	Y	0.350	0.400	0.375	0.325
D4	X	0.330	0.310	0.310	0.330
	Y	0.350	0.325	0.275	0.300

COLOR COORDINATES MEASUREMENT ALLOWANCE ± 0.01



RECOMMENDED P.C.B. HOLE PATTERN

RoHS COMPLIANT 551-XX07F

Part Numbers with the "F" suffix ending are RoHS Compliant. For example: 551-0207F. 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.

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SCALE: DRAWING SCALE	DRAWING NUMBER	REV
ALL DIM'S: INCH (mm)	C-17306	G
TOLERANCES: UNLESS OTHERWISE SPECIFIED	TITLE 3mm CBI, .200 LED CENTERLINE RoHS COMPLIANT	
FRACTIONS: ±1/64	MATERIAL	
DECIMALS (.XX): ±.02	Dialight 1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com	
DECIMALS (.XXX): ±.010	FSCM 83330	
ANGLES: ±3°	SHEET 1 OF 1 FAMILY TABLE:	
FINISH		