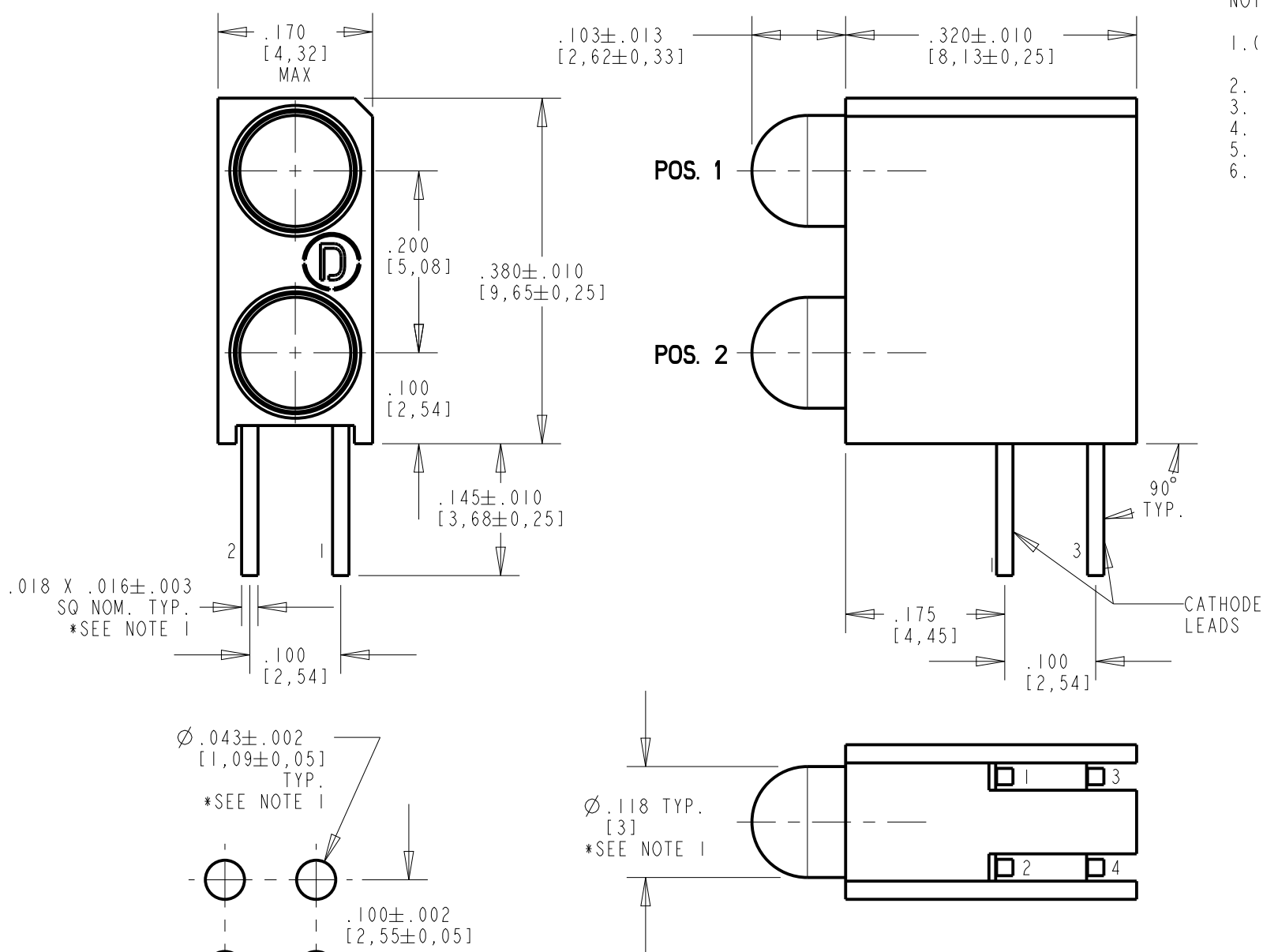
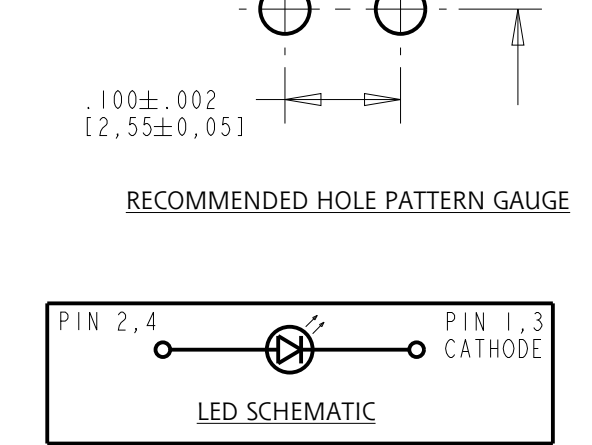
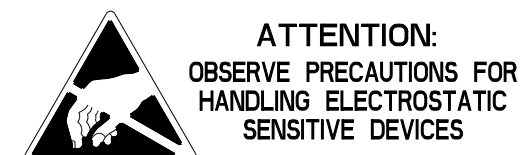


ASSY. NO. (CAT. NO.)	LED COLOR	
	POSITION 1	POSITION 2
553-0101F	BLANK	RED
553-0102F	BLANK	GREEN
553-0103F	BLANK	YELLOW
553-0107F	BLANK	ORANGE
553-0108F	BLANK	BLUE
553-0110F	RED	BLANK
553-0111F	RED	RED
553-0112F	RED	GREEN
553-0113F	RED	YELLOW
553-0118F	RED	BLUE
553-0120F	GREEN	BLANK
553-0121F	GREEN	RED
553-0122F	GREEN	GREEN
553-0123F	GREEN	YELLOW
553-0127F	GREEN	ORANGE
553-0128F	GREEN	BLUE
553-0130F	YELLOW	BLANK
553-0131F	YELLOW	RED
553-0132F	YELLOW	GREEN
553-0133F	YELLOW	YELLOW
553-0171F	ORANGE	RED
553-0172F	ORANGE	GREEN
553-0173F	ORANGE	YELLOW
553-0177F	ORANGE	ORANGE
553-0181F	BLUE	RED
553-0182F	BLUE	GREEN
553-0183F	BLUE	YELLOW
553-0188F	BLUE	BLUE
553-0199F	WHITE	WHITE
553-0201F	BLANK	RED
553-0202F	BLANK	GREEN
553-0203F	BLANK	YELLOW
553-0210F	RED	BLANK
553-0211F	RED	RED
553-0212F	RED	GREEN
553-0213F	RED	YELLOW
553-0220F	GREEN	BLANK
553-0221F	GREEN	RED
553-0222F	GREEN	GREEN
553-0223F	GREEN	YELLOW
553-0230F	YELLOW	BLANK
553-0231F	YELLOW	RED
553-0232F	YELLOW	GREEN
553-0233F	YELLOW	YELLOW
553-0301F	BLANK	RED
553-0302F	BLANK	GREEN
553-0303F	BLANK	YELLOW
553-0310F	RED	BLANK
553-0311F	RED	RED
553-0312F	RED	GREEN
553-0313F	RED	YELLOW
553-0320F	GREEN	BLANK
553-0321F	GREEN	RED
553-0322F	GREEN	GREEN
553-0323F	GREEN	YELLOW
553-0331F	YELLOW	RED
553-0332F	YELLOW	GREEN
553-0333F	YELLOW	YELLOW
553-0432F	YELLOW	GREEN



- NOTES:
- (FOR ORANGE: LEADS .018 SQ. NOM.), LED BODY Ø.115±.010 AND THE PC BOARD TOLERANCE ON LEAD THICKNESS TO BE ±.003.
 - 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: 553-0XXXF.
 - THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.

RoHS COMPLIANT 553-0XXXF
 Part Numbers with the "F" suffix ending are RoHS Compliant.
 For example: 553-0101F
 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.



553-01XXF OPERATING CHARACTERISTICS AT 25°C AMBIENT: 10 mA LEDs						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	2.5	8.7	18	mcd	I _F = 10 mA
	YELLOW	7.4	14.5	30		
	GREEN	5.6	12.6	29		
	BLUE	11	16	23		
	ORANGE	3.4	7.0	10.8		
PEAK WAVELENGTH	RED		635		nm	I _F = 10 mA
	YELLOW		588			
	GREEN		565			
	BLUE		468			
	ORANGE		600			
DOMINANT WAVELENGTH	RED	615	625	632	nm	I _F = 10 mA
	YELLOW	585	590	595		
	GREEN	564	568	573		
	BLUE	460	467	475		
	ORANGE	597	602	616		
FORWARD VOLTAGE	RED		2.0	2.6	V	I _F = 10 mA
	YELLOW		2.1	2.6		
	GREEN		2.1	2.6		
	BLUE	2.0	2.7	4.1		
	ORANGE	1.5	1.9	3.5		
REVERSE CURRENT	RED			100	μA	V _R = 5V
	YELLOW			100		
	GREEN			100		
	BLUE			10		
	ORANGE			100		
VIEWING ANGLE	RED		60		DEGREE	I _F = 10 mA
	YELLOW		60			
	GREEN		60			
	BLUE		100			
	ORANGE		60			

BIN	LIMITS (WHITE LED) (CHROMATICITY COORDINATES)			
	X	Y	Z	U
A3	X	0.270	0.270	0.250
	Y	0.275	0.325	0.300
A4	X	0.270	0.250	0.250
	Y	0.275	0.250	0.200
B3	X	0.290	0.290	0.270
	Y	0.300	0.350	0.325
B4	X	0.290	0.270	0.290
	Y	0.300	0.275	0.225
C3	X	0.310	0.310	0.290
	Y	0.325	0.375	0.350
C4	X	0.310	0.290	0.310
	Y	0.325	0.300	0.275
D3	X	0.330	0.330	0.310
	Y	0.350	0.400	0.375
D4	X	0.330	0.310	0.330
	Y	0.350	0.325	0.300

553-0432F ABSOLUTE MAXIMUM RATINGS AT 25°C						
LED COLOR	POWER DISSIPATION (mW)	FORWARD CURRENT (mA)	PEAK FORWARD CURRENT (mA)	OPERATING TEMPERATURE (°C)	STORAGE TEMPERATURE (°C)	DERATING CURVE (mA/°C)
GREEN	120	30	90 (1/10 DUTY CYCLE, 0.1ms PULSE WIDTH)	-30°C TO +85°C	-40°C TO +100°C	0.555@40°C
YELLOW	75	30		-40°C TO +80°C		0.666@50°C

553-0432F OPERATING CHARACTERISTICS AT 25°C AMBIENT										
LED COLOR	TEST CONDITION (mA)	LUMINOUS INTENSITY (mcd)		FORWARD VOLTAGE (V)		DOMINANT WAVELENGTH (nm)			REVERSE CURRENT (μA)	VIEWING ANGLE (DEGREES)
		TYP	MIN	TYP	MAX	MIN	TYP	MAX	MAX	TYP
GREEN	20	1000	1600	3.3	4.0	520	525	531	10μA@VR=5V	45
YELLOW	20	400	800	2.0	2.5	-	590	-	100μA@VR=5V	-

553-02XXF OPERATING CHARACTERISTICS AT 25°C AMBIENT: 2 mA LOW CURRENT LEDs						
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	RED	0.75	2.5		mcd	I _F = 2 mA
	YELLOW	0.4	4.5			
	GREEN	0.4	1.1			
PEAK WAVELENGTH	RED		635		nm	I _F = 2 mA
	YELLOW		585			
	GREEN		565			
FORWARD VOLTAGE	RED	1.7	2.2		V	I _F = 2 mA
	YELLOW	1.8	2.2			
	GREEN	1.9	2.2			
REVERSE CURRENT	ALL			10	μA	V _R = 5V
VIEWING ANGLE	ALL		60		DEGREE	

553-02XXF ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT: 2 mA LOW CURRENT LEDs			
	RED	GREEN	YELLOW
POWER DISSIPATION	20		
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 0.1ms PULSE WIDTH)	500		
CONTINUOUS FORWARD CURRENT	7		
LINEAR DERATING FROM 95°C	0.7		
REVERSE VOLTAGE	5		
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.	260		
OPERATING TEMPERATURE	-55 TO +100		
STORAGE TEMPERATURE	-55 TO +100		

553-01XXF ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT							
	RED	YELLOW	GREEN	BLUE	ORANGE	WHITE	UNITS
POWER DISSIPATION	100	60	120	120	135	120	mW
PEAK FORWARD CURRENT (1/5 DUTY CYCLE, 1 ms PULSE WIDTH) (1/10, .1ms FOR BLUE) (+10 μs D=.005 FOR ORANGE)	90	60	90	100	500	100	mA
CONTINUOUS FORWARD CURRENT	30	20	30	30	30	30	mA
LINEAR DERATING FROM 50°C (30°C FOR BLUE, 30°C FOR WHITE)	0.40	0.25	0.40	.5	0.50	.45	mA/°C
REVERSE VOLTAGE	5						V
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.	260						°C
OPERATING TEMPERATURE	-55 TO +100	-40 TO +85	-55 TO +100	-40 TO +85	-55 TO +100	-40 TO +85	°C
STORAGE TEMPERATURE	-55 TO +100	-55 TO +100	-55 TO +100	-55 TO +100	-55 TO +100	-40 TO +100	°C

REV	REVISIONS	DRN	CKD	APP	DATE
A	NEW RELEASE	TWC	MES	N.O.	8-5-05
B	ADDED P/N 553-0181F	SM	N.O.	MES	11-13-06
C	CHANGED IN SIDE VIEW POS 3 TO POS 2	SM	N.O.	MES	11-17-06
D	ADDED P/N 553-0199F & NOTE 4	SM	N.O.	MES	5-1-07
E	OPERATING CHARACTERISTICS TABLE CORRECTED FOR WHITE LED	SM	N.O.	MES	5-22-07
F	UPDATED WHITE LED SPECS	KLJ	NO	MES	2-7-08
G	ADDED P/Ns: 553-0107F, -0127F, -0171F, -0172F, & -0173F; ADDED ORANGE LED SPECS; UPDATED LED SPECS; ADDED DUAL DIMS; UPDATED TOLERANCES; ADDED NOTES 2 & 3; ADDED DOMINANT WAVELENGTH FOR 10 mA LEDs	JG	WFB	NO	4-29-13
H	ADDED TOLERANCES TO LEAD THICKNESS DIMENSIONS	MMB	WFB	NO	6-21-13
J	UPDATED LED SPECS FOR RED, GREEN AND YELLOW LED'S FOR P/N'S 553-01XXF	BP	---	NO	8-22-16
K	UPDATED LED SPECS FOR 553-01XXF, 553-02XXF & 553-03XXF	LD	---	NO	6-25-19
L	ADDED PART No: 553-0183F	JGL	NO	NO	5-05-2020
M	REVISED LUM INT SPEC OF YELLOW	LD	CS	---	8-2-23
N	ADDED P/N 553-0432F, ADDED LED SPECS TABLE FOR 553-0432F	JSG	CS	NO	06SEP23

553-03XXF OPERATING CHARACTERISTICS AT 25°C AMBIENT: 5 V INTEGRAL RESISTOR LEDs					
LED CHARACTERISTICS	COLOR	MIN.	TYP.	MAX.	UNITS
LUMINOUS INTENSITY	RED	8.7	29.0		mcd
	YELLOW	3.7	12.6		
	GREEN	5.6	19.0		
PEAK WAVELENGTH	RED		635		nm
	YELLOW		585		
	GREEN		565		
FORWARD CURRENT	RED		10	20	mA
	YELLOW		10	20	
	GREEN		10	20	
REVERSE CURRENT	RED			100	μA
	YELLOW			100	
	GREEN			100	
VIEWING ANGLE	ALL		60		DEGREE

553-03XXF ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT 5 V INTEGRAL RESISTOR LEDs				
	RED	GREEN	YELLOW	UNITS
CONTINUOUS FORWARD VOLTAGE	7.5			V
REVERSE VOLTAGE	5			V
LINEAR DERATING FROM 50°C	0.071			V/°C
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.	260			°C
OPERATING TEMPERATURE	-40 TO +85			°C
STORAGE TEMPERATURE	-55 TO +100			°C

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SCALE: 6:000 DRAWING NUMBER: C-17277 REV: N

TOLERANCES: UNLESS OTHERWISE SPECIFIED
 FRACTIONS: ±1/64
 DECIMALS (.XX): ±.02
 DECIMALS (.XXX): ±.015

ANGLES: ±3°

TITLE: 3mm LED BI-LEVEL CBI
 MATERIAL: RoHS COMPLIANT

FINISH: -

FSCM 83330 SHEET 1 OF 1 FAMILY TABLES:

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