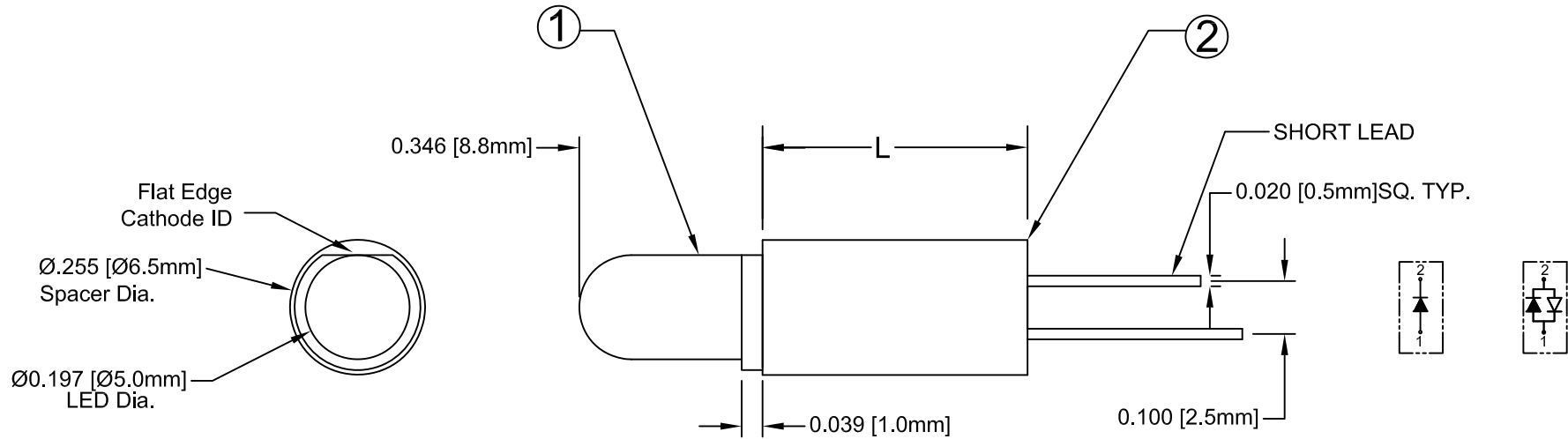
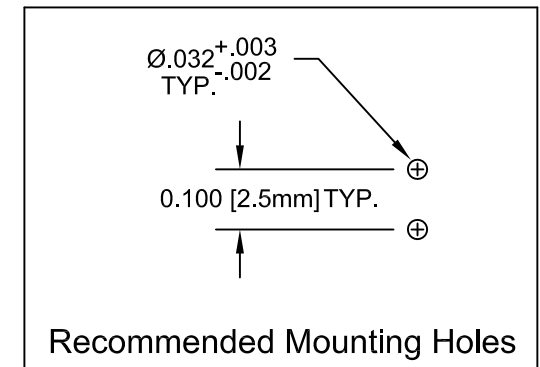


ITEM	Q'TY	PART NUMBER	PART DESCRIPTION
1	1	5XX-F	T-1 ¾ (5mm) Flange LED, See sheet 2 & 3
2	1	ELM8XXX	Extruded, Self-Retaining LED Spacer

REV.	DESCRIPTION	DATE	APPROVED
B	Updated Drawing to Show Flanged LED.	10/17/06	M. C.
C	Changed Spacer from ELM3 to ELM8.	01/17/07	M. C.
D	Added -F to Sheets 2 and 3.	01/04/08	M. C.
E	Removed Tolerance Note.	09/03/08	M. C.
F	Added Bi-Color LEDs on Sheet 3	02/09/11	T. Y.
G	Added Tape & Reel Options	06/07/11	T. Y.
H	Tape & Reel Design Update	11/21/11	T. Y.



BI-COLOR POLARITY		
LED P/N	(1) Cathode	(2) Cathode
5BC-F	Green	Red
5BC-Y/G-F	Green	Yellow



ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

REVERSE VOLTAGE _____ 5V
 REVERSE CURRENT (VR=5V) _____ 100µA
 OPERATING TEMPERATURE RANGE _____ -25°C ~ 85°C
 STORAGE TEMPERATURE _____ -30°C ~ 100°C
 LEAD SOLDERING TEMPERATURE (1/16" FROM BODY) _____ 260°C for 5 Seconds

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)		BIVAR® 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DECIMALS	ANGULAR		
.X ± .1	X° ± 1°		
.XX ± .02			TITLE: Extruded Vertical T-1 ¾ (5mm) LED Standard Spacer Profile Assy
.XXX ± .010			
DESIGNED: Sonny Dam	DATE: 05/05/06	PART NO: ELM3XXX5XX	
CHECKED: T. Yin	DATE: 05/05/06	CAGE CODE : 32559	SHEET # 1 OF 4
CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.			

REV.	DESCRIPTION	DATE	APPROVED
	See Sheet #1		

LED Part No.	Chip			Lens Appearance	Absolute Maximum Ratings				Electro-Optical Data @ 20mA			Viewing Angle (Deg)
	Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If (mA)	Vf (V)		Iv (mcd)	
									Typ.	Max.	Typ.	
5BWC-F	GaN/SiC	430	BLUE	WATER CLEAR	65	150	25	70	4.0	4.5	125	20
5BWD-F	GaN/SiC	430	BLUE	DIFFUSED	65	150	25	70	4.0	4.5	30	45
5BWT-F	GaN/SiC	430	BLUE	TINTED	65	150	25	70	4.0	4.5	125	20
5PGC-F	GaP/GaP	555	PURE GREEN	WATER CLEAR	30	80	30	150	2.2	2.6	30	30
5PGD-F	GaP/GaP	555	PURE GREEN	DIFFUSED	30	80	30	150	2.2	2.6	15	45
5PGT-F	GaP/GaP	555	PURE GREEN	TINTED	30	80	30	150	2.2	2.6	30	30
5GC-F	GaP/GaP	565	GREEN	WATER CLEAR	30	80	30	150	2.2	2.6	150	20
5GD-F	GaP/GaP	565	GREEN	DIFFUSED	30	80	30	150	2.2	2.6	70	45
5GT-F	GaP/GaP	565	GREEN	TINTED	30	80	30	150	2.2	2.6	150	20
5YC-F	GaAsP/GaP	585	YELLOW	WATER CLEAR	35	80	30	150	2.1	2.6	140	20
5YD-F	GaAsP/GaP	585	YELLOW	DIFFUSED	35	80	30	150	2.1	2.6	70	45
5YT-F	GaAsP/GaP	585	YELLOW	TINTED	35	80	30	150	2.1	2.6	140	20
5AC-F	GaAsP/GaP	610	AMBER	WATER CLEAR	35	80	30	150	2.2	2.6	70	20
5AD-F	GaAsP/GaP	610	AMBER	DIFFUSED	35	80	30	150	2.2	2.6	45	45
5AT-F	GaAsP/GaP	610	AMBER	TINTED	35	80	30	150	2.2	2.6	70	20
5HC-F	GaAsP/GaP	635	HE RED	WATER CLEAR	45	80	30	150	2.0	2.6	150	20
5HD-F	GaAsP/GaP	635	HE RED	DIFFUSED	45	80	30	150	2.0	2.6	80	45
5HT-F	GaAsP/GaP	653	HE RED	TINTED	45	80	30	150	2.0	2.6	150	20
5RC-F	GaAsP/GaAs	655	RED	WATER CLEAR	40	80	40	200	1.7	2.0	15	20
5RD-F	GaAsP/GaAs	655	RED	DIFFUSED	40	80	40	200	1.7	2.0	5	45
5RT-F	GaAsP/GaAs	655	RED	TINTED	40	80	40	200	1.7	2.0	15	20

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) <u>10% All Values</u> <u>ANGULAR</u> $X^\circ \pm 1^\circ$		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
			
DESIGNED:	DATE:	PART NO:	REVISION:
Sonny Dam	05/05/06	ELM3XXX5XX	H
CHECKED:	DATE:	CAGE CODE : 32559	SHEET # 2 OF 4
T. Yin	05/05/06	CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.	

REV.	DESCRIPTION	DATE	APPROVED
	See Sheet #1		

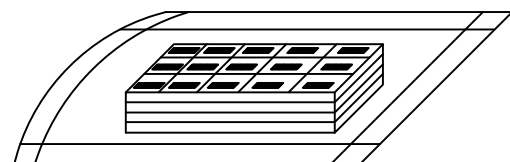
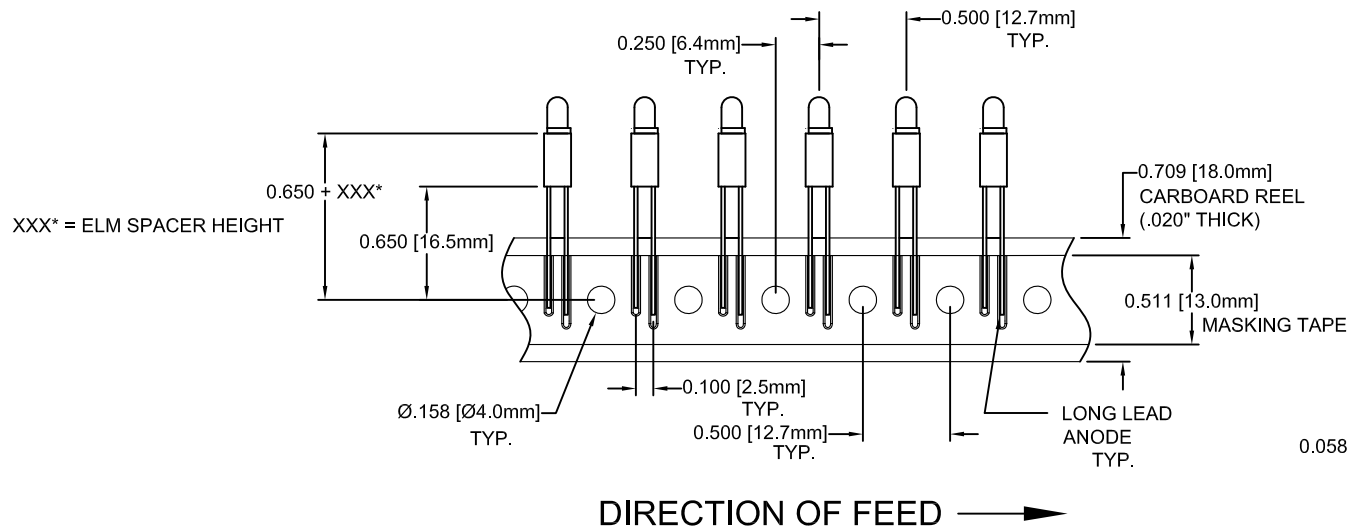
LED Part No.	Chip			Lens Appearance	Absolute Maximum Ratings				Electro-Optical Data @ 2mA			Viewing Angle (Deg)
	Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If (mA)	Vf (V)		Iv (mcd)	
									Typ.	Max.	Typ.	
5BWDL-F	GaN/SiC	430	BLUE	DIFFUSED	65	90	5	-	3.5	4.0	6.0	45
5PGDL-F	GaP/GaP	555	PURE GREEN	DIFFUSED	25	10	5	-	1.9	2.2	1.0	45
5GDL-F	GaP/GaP	565	GREEN	DIFFUSED	30	10	5	-	1.9	2.2	3.0	45
5YDL-F	GaAsP/GaP	585	YELLOW	DIFFUSED	35	10	5	-	1.9	2.2	3.0	45
5ADL-F	GaAsP/GaP	610	AMBER	DIFFUSED	35	10	5	-	1.9	2.2	6.0	45
5HDL-F	GaAsP/GaP	635	HE RED	DIFFUSED	45	10	5	-	1.8	2.2	3.0	45
5RDL-F	GaAsP/GaAs	660	SUPER RED	DIFFUSED	40	10	5	-	1.9	2.2	15.0	45

LED Part No.	Chip			Lens Appearance	Absolute Maximum Ratings				Electro-Optical Data @ 10mA			Viewing Angle (Deg)
	Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If (mA)	Vf (V)		Iv (mcd)	
									Typ.	Max.	Typ.	
5GD5V-F	GaP/GaP	565	GREEN	DIFFUSED	-	-	8	12	-	5.0	25.0	45
5YD5V-F	GaAsP/GaP	585	YELLOW	DIFFUSED	-	-	8	12	-	5.0	20.0	45
5AD5V-F	GaAsP/GaP	610	AMBER	DIFFUSED	-	-	8	12	-	5.0	60.0	45
5HD5V-F	GaAsP/GaP	635	HE RED	DIFFUSED	-	-	8	12	-	5.0	50.0	45
5RD5V-F	GaAsP/GaP	655	RED	DIFFUSED	-	-	8	12	-	5.0	15.0	45

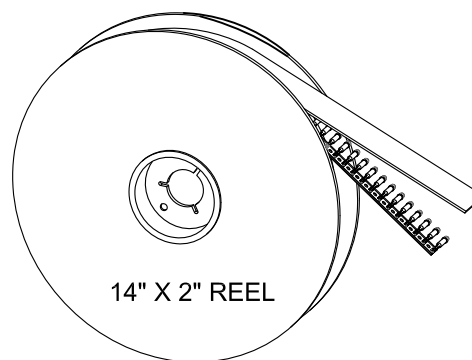
LED Part No.	Chip			Lens Appearance	Absolute Maximum Ratings				Electro-Optical Data @ 10mA			Viewing Angle (Deg)
	Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If (mA)	Vf (V)		Iv (mcd)	
									Typ.	Max.	Typ.	
5BC-F	GaAsP/GaP	625	RED	DIFFUSED	-	80	20	150	2.0	2.8	8.0	45
	GaP/GaP	568	GREEN	DIFFUSED	-	80	20	150	2.1	2.8	8.0	45
5BC-Y/G-F	GaAsP/GaP	590	YELLOW	DIFFUSED	-	85	20	150	2.0	2.8	6.0	45
	GaP/GaP	568	GREEN	DIFFUSED	-	80	20	150	2.1	2.8	8.0	45

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) <u>10% All Values</u>		ANGULAR $X^{\circ} \pm 1^{\circ}$		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
				TITLE: Extruded Vertical T-1¼ (5mm) LED Standard Spacer Profile Assy	
DESIGNED: Sonny Dam		DATE: 05/05/06		PART NO: ELM3XXX5XX	
CHECKED: T. Yin		DATE: 05/05/06		REVISION: H	
				CAGE CODE : 32559 SHEET # 3 OF 4	
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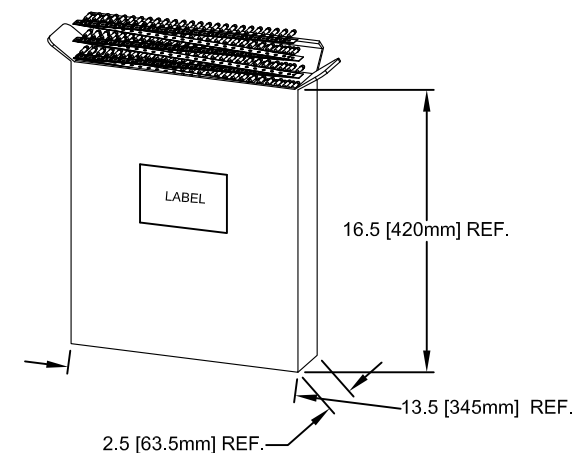
REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET #1		



STANDARD PACKAGING TRAY



TAPE & REEL
1,000 pcs / reel



AMMO PACK
2,000 pcs / box

NOTE:

1. STANDARD PART NUMBERS ARE PACKAGED IN LOOSE PIECES USING PACKAGING TRAYS
2. ADD "T" SUFFIX TO PART NUMBER FOR TAPE AND REEL PACKAGING OPTION (1,000 PCS/REEL)
3. ADD "A" SUFFIX TO PART NUMBER FOR AMMO PACK OPTION (2,000 PCS/BOX)
4. TAPE AND REEL PACKAGING COMPLY TO EIA-468-C

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)		BIVAR [®] 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DECIMALS	ANGULAR		
.X ± .1	X° ± 1°	TITLE: Extruded Vertical T1 3/4 (5mm) LED Standard Spacer Profile Assy	
.XX ± .02			
.XXX ± .010		PART NO: ELM3XXX5XX REVISION: H	
DESIGNED: Sonny Dam	DATE: 05/05/06		
CHECKED: T. Yin	DATE: 05/05/06	CAGE CODE : 32559 SHEET # 4 OF 4 CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.	