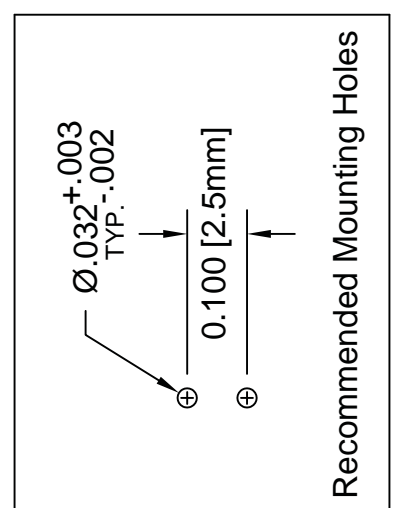
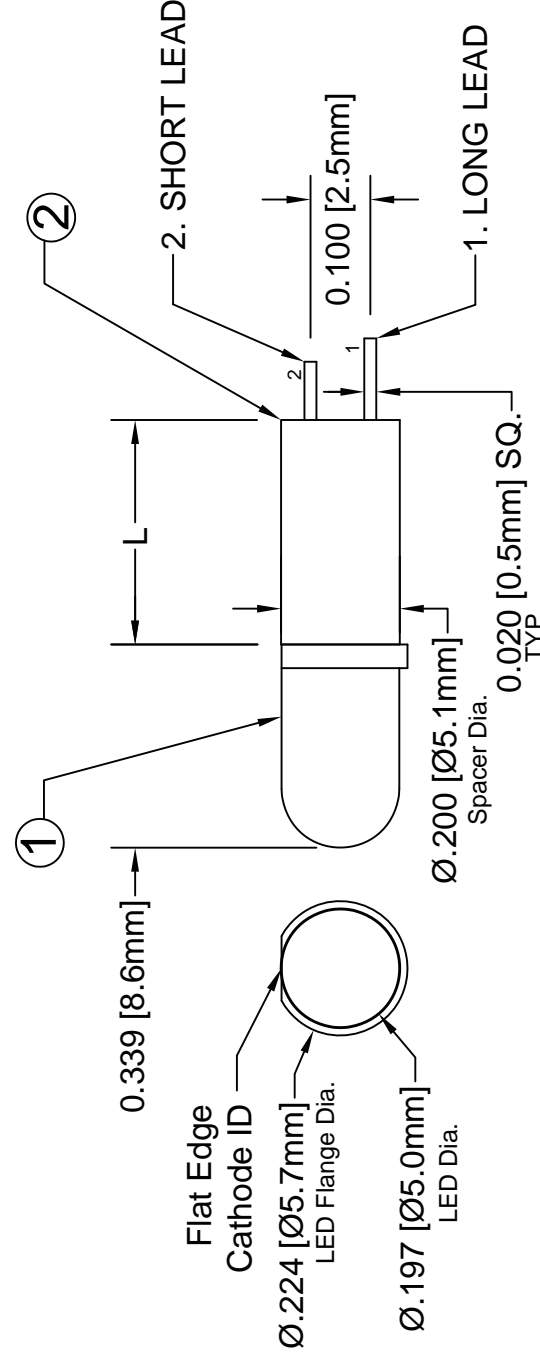


REV.	DESCRIPTION	DATE	APPROVED
M	LED Offering List Update	07/26/12	T. Y.
N	Removed LED Duplication From Offering List	11/09/12	T. Y.
P	Corrected P/N Typo in BOM	09/20/13	T. Y.
R	Updated LED Optical Characteristics	09/12/15	J. C.
T	Corrected P/N Typo in Sheet#3 & #4	07/27/17	J. C.

ITEM	Q'TY	PART NUMBER	PART DESCRIPTION
1	1	5XX-F	T-1 1/4 (5mm) Flanged LED, See Pages 2 to 4
2	1	ELM 1-XXX	Extruded, Self-Retaining LED Spacer

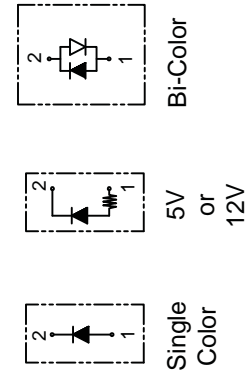


ELM1XXX5XX

ELM Series

5mm LED, Emitted Color and Lens Appearance

ELM Spacer Length "L" - i.e. 0.120" length, use 120 - For metric, use whole number. i.e. 2MM, 10MM



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

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

REVERSE VOLTAGE _____ 5V

REVERSE CURRENT _____ 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

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STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)
 DECIMALS .X ±.1
 ANGULAR .XX ±.02
 .XXX ±.010

TITLE: EXTRUDED VERTICAL T-1 1/4 (5mm) LED NARROW PROFILE ASSY
 PART NO: ELM1XXX5XX
 REVISION: T

DESIGNED: M. Doan
 CHECKED: T. Yin

DATE: 07/26/12
 DATE: 07/26/12

CAGE CODE: 32559 SHEET # 1 OF 5
 CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.

LED Assy. No.	Chip		Lens Appearance	Electro-Optical Data @ 20mA				Viewing Angle 2θ ½ (Deg)	LED P/N	
	Material	Peak Wave Length λp (nm)		Emitted Color	If (mA)	Vf (V)				Iv (mcd)
						TYP	MAX			
ELM1XX5BWC	GaN/SiC	430	BLUE	WATER CLEAR	25	4	4.5	25	20	5BWC-F
ELM1XX5BWD	GaN/SiC	430	BLUE	DIFFUSED	25	4	4.5	15	45	5BWD-F
ELM1XX5BWT	GaN/SiC	430	BLUE	TINTED	25	4	4.5	30	20	5BWT-F
ELM1XX5GC	GaP/GaP	568	GREEN	WATER CLEAR	30	2.1	2.8	40	35	5GC-F
ELM1XX5GD	GaP/GaP	568	GREEN	DIFFUSED	30	2.1	2.8	25	45	5GD-F
ELM1XX5GT	GaP/GaP	568	GREEN	TINTED	30	2.1	2.8	40	35	5GT-F
ELM1XX5PGC	GaP/GaP	555	PURE GREEN	WATER CLEAR	30	2.2	2.8	10	35	5PGC-F
ELM1XX5PGD	GaP/GaP	555	PURE GREEN	DIFFUSED	30	2.2	2.8	10	45	5PGD-F
ELM1XX5PGT	GaP/GaP	555	PURE GREEN	TINTED	30	2.2	2.8	10	35	5PGT-F
ELM1XX5YC	GaAsP/GaP	590	YELLOW	WATER CLEAR	30	2	2.8	40	35	5YC-F
ELM1XX5YD	GaAsP/GaP	590	YELLOW	DIFFUSED	30	2	2.8	25	45	5YD-F
ELM1XX5YT	GaAsP/GaP	590	YELLOW	TINTED	30	2	2.8	40	35	5YT-F
ELM1XX5AC	GaAsP/GaP	605	AMBER	WATER CLEAR	30	2	2.8	40	35	5AC-F
ELM1XX5AD	GaAsP/GaP	605	AMBER	DIFFUSED	30	2	2.8	25	45	5AD-F
ELM1XX5AT	GaAsP/GaP	605	AMBER	TINTED	30	2	2.8	40	35	5AT-F
ELM1XX5HC	GaAsP/GaP	625	HE RED	WATER CLEAR	30	2	2.8	40	35	5HC-F
ELM1XX5HD	GaAsP/GaP	625	HE RED	DIFFUSED	30	2	2.8	25	45	5HD-F
ELM1XX5HT	GaAsP/GaP	625	HE RED	TINTED	30	2	2.8	40	35	5HT-F
ELM1XX5RC	GaP/GaP	700	RED	WATER CLEAR	20	2.1	2.8	2	35	5RC-F
ELM1XX5RD	GaP/GaP	700	RED	DIFFUSED	20	2.1	2.8	2	45	5RD-F
ELM1XX5RT	GaP/GaP	700	RED	TINTED	20	2.1	2.8	2	35	5RT-F
ELM1XX5BC-A/G	GaAsP/GaP	605	AMBER	WHITE DIFFUSED	30	2.0	2.8	6	45	5BC-A/G-F
	GaP/GaP	568	GREEN		30	2.1	2.8	6		
ELM1XX5BC	GaAsP/GaP	625	RED	WHITE DIFFUSED	30	2.0	2.8	6	45	5BC-F
	GaP/GaP	568	GREEN		30	2.1	2.8	8		
ELM1XX5BC-R/Y	GaAsP/GaP	625	RED	WHITE DIFFUSED	30	2.0	2.8	6	45	5BC-R/Y-F
	GaAsP/GaP	590	YELLOW		30	2.0	2.8	5		
ELM1XX5BC-Y/G	GaAsP/GaP	590	YELLOW	WHITE DIFFUSED	30	2.0	2.8	5	45	5BC-Y/G-F
	GaP/GaP	568	GREEN		30	2.1	2.8	8		

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STANDARD TOLERANCE
 (UNLESS OTHERWISE SPECIFIED)
 ±10% ALL VALUES

ANGULAR X° ±5°

DESIGNED: **M. Doan**
 CHECKED: **T. Yin**

DATE: **07/26/12**

REVISION: **T**

TITLE: **EXTRUDED VERTICAL T-1¼ (5mm) LED NARROW PROFILE ASSY**

PART NO: **ELM1XX5XX**

CAGE CODE : **32559** SHEET # **2 OF 5**

CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.

REV.	DESCRIPTION	DATE	APPROVED
SEE SHEET #1			

LED Assy. No.	Chip		Lens Appearance	Electro-Optical Data @ 20mA			Viewing Angle 2θ ½ (Deg)	LED P/N	
	Material	Peak Wave Length λp (nm)		Emitted Color	If (mA)	Vf (V)			Iv (mcd)
ELM1XX5UBWC	InGaN/SiC	468	BLUE	50	3.2	8000	15	5BWC2.515F	
ELM1XX5SSGC	GaP/GaP	568	GREEN	30	2.1	60	35	5SSGC-F	
ELM1XX5SSGD	GaP/GaP	568	GREEN	30	2.1	50	40	5SSGD-F	
ELM1XX5SSGT	GaP/GaP	568	GREEN	30	2.1	60	35	5SSGT-F	
ELM1XX5SSYC	GaAsP/GaP	590	YELLOW	30	2	600	35	5SSYC-F	
ELM1XX5SSYD	GaAsP/GaP	590	YELLOW	30	2	150	40	5SSYD-F	
ELM1XX5SSYT	GaAsP/GaP	590	YELLOW	30	2	600	35	5SSYT-F	
ELM1XX5SSRC	GaAlAs/GaAs	645	SUPER RED	30	1.7	60	35	5SSRC-F	
ELM1XX5SSRD	GaAlAs/GaAs	645	SUPER RED	30	1.7	40	40	5SSRD-F	
ELM1XX5SSRT	GaAlAs/GaAs	645	SUPER RED	30	1.7	60	35	5SSRT-F	
ELM1XX5UGC	AlGainP	570	GREEN	30	2.1	400	35	5UGC-F	
ELM1XX5SUGC	AlGainP	570	GREEN	30	2.1	300	35	5SUGC-F	
ELM1XX5UYC	AlGainP	590	YELLOW	30	2	1000	30	5UYC-F	
ELM1XX5SUYC	AlGainP	590	YELLOW	30	2	700	35	5SUYC-F	
ELM1XX5UUYC	AlGainP	590	YELLOW	30	2	500	35	5UUYC-F	
ELM1XX5UOC	AlGainP	625	ORANGE	30	1.8	1400	35	5UOC-F	
ELM1XX5UOC	AlGainP	625	ORANGE	30	1.8	1300	35	5SUOC-F	
ELM1XX5URC	GaAlAs/GaAs	645	RED	30	1.7	400	30	5URC-F	
ELM1XX5SURC	AlGainP	640	RED	30	1.8	500	35	5SURC-F	
ELM1XX5UWC	InGaN/SiC	6500K	WHITE	100	3.5	2700	30	5WC2.730F	

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STANDARD TOLERANCE
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 ±10% ALL VALUES

ANGULAR X° ±5°

DESIGNED: **M. Doan**
 CHECKED: **T. Yin**

DATE: **07/26/12**

REVISION: **T**

TITLE: **EXTRUDED VERTICAL T-1¼ (5mm) LED NARROW PROFILE ASSY**

PART NO: **ELM1XX5XX**

CAGE CODE : **32559** SHEET # **3** OF **5**

CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.

LED Assy. No.	Peak Wave Length λ_p (nm)	Emitted Color	Lens Appearance	Electro-Optical Data				Viewing Angle $2\theta_{1/2}$ (Deg)	LED P/N
				If (mA)	Vf (V)	Iv (mcd)			
						TYP	MAX		
LOW CURRENT									
Data @ 2mA									
ELM1XXX5BWDL	430	BLUE	DIFFUSED	2	3.8	4.2	4	40	5BWDL-F
ELM1XXX5PGDL	555	PURE GREEN	DIFFUSED	2	2.1	2.6	1	40	5PGDL-F
ELM1XXX5GDL	568	GREEN	DIFFUSED	2	2.1	2.6	4	40	5GDL-F
ELM1XXX5YDL	590	YELLOW	DIFFUSED	2	2	2.6	4	40	5YDL-F
ELM1XXX5ADL	605	AMBER	DIFFUSED	2	2	2.6	4	40	5ADL-F
ELM1XXX5HDL	625	HE RED	DIFFUSED	2	2	2.6	5	40	5HDL-F
ELM1XXX5SRDL	645	SUPER RED	DIFFUSED	2	1.7	2.3	6	40	5SRDL-F
5 Volt									
Data @ 5V									
ELM1XXX5BWD5V	430	BLUE	DIFFUSED	-	-	5	15	40	5BWD5V-F
ELM1XXX5GC5V	568	GREEN	WATER CLEAR	-	-	5	40	40	5GC5V-F
ELM1XXX5GD5V	568	GREEN	DIFFUSED	-	-	5	25	40	5GD5V-F
ELM1XXX5GT5V	568	GREEN	TINTED	-	-	5	40	40	5GT5V-F
ELM1XXX5AD5V	605	AMBER	DIFFUSED	-	-	5	25	40	5AD5V-F
ELM1XXX5HD5V	625	HE RED	DIFFUSED	-	-	5	30	40	5HD5V-F
ELM1XXX5RD5V	700	RED	DIFFUSED	-	-	5	1.5	40	5RD5V-F
ELM1XXX5YD5V	590	YELLOW	DIFFUSED	-	-	5	25	40	5YD5V-F
12 Volt									
Data @ 12V									
ELM1XXX5GC12V	568	GREEN	WATER CLEAR	-	-	12	40	35	5GC12V-F
ELM1XXX5GD12V	568	GREEN	DIFFUSED	-	-	12	25	40	5GD12V-F
ELM1XXX5HC12V	625	HE RED	WATER CLEAR	-	-	12	50	35	5HC12V-F
ELM1XXX5HD12V	625	HE RED	DIFFUSED	-	-	12	30	40	5HD12V-F
ELM1XXX5RC12V	700	RED	WATER CLEAR	-	-	12	2	35	5RC12V-F
ELM1XXX5RD12V	700	RED	DIFFUSED	-	-	12	1.5	40	5RD12V-F
ELM1XXX5YC12V	590	YELLOW	WATER CLEAR	-	-	12	25	35	5YC12V-F
ELM1XXX5YD12V	590	YELLOW	DIFFUSED	-	-	12	20	40	5YD12V-F

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STANDARD TOLERANCE
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 ±10% ALL VALUES

ANGULAR
 $X^\circ \pm 5^\circ$

TITLE: EXTRUDED VERTICAL T-1/4
 (5mm) LED NARROW PROFILE ASSY

DESIGNED: M. Doan
 CHECKED: T. Yin

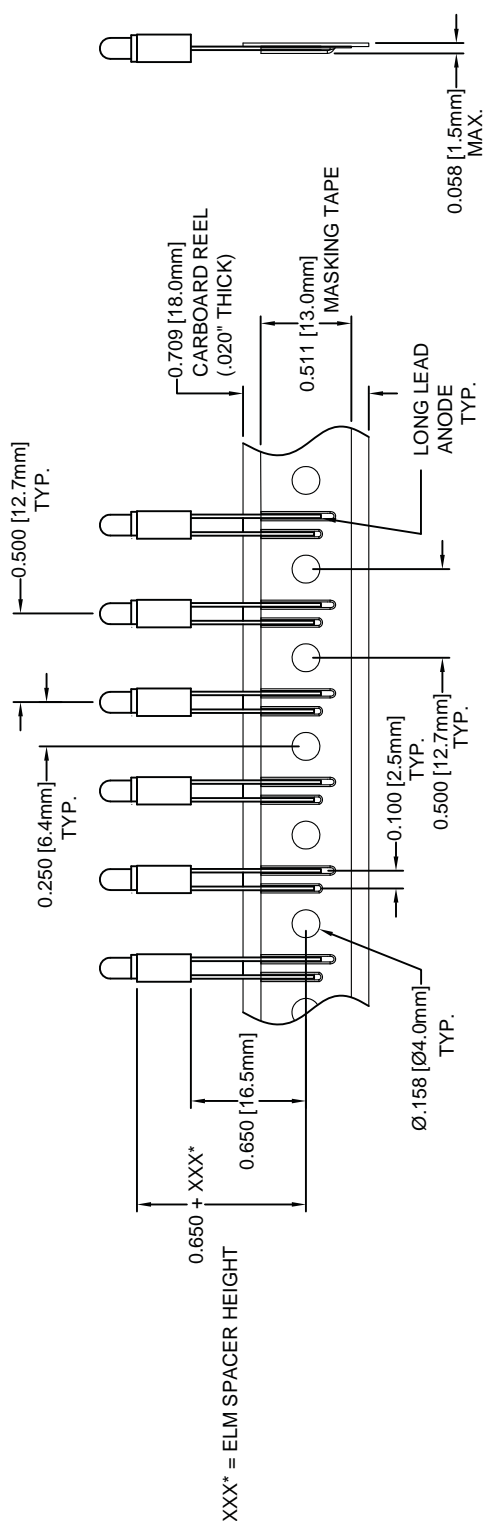
DATE: 07/26/12
 DATE: 07/26/12

REVISION: T

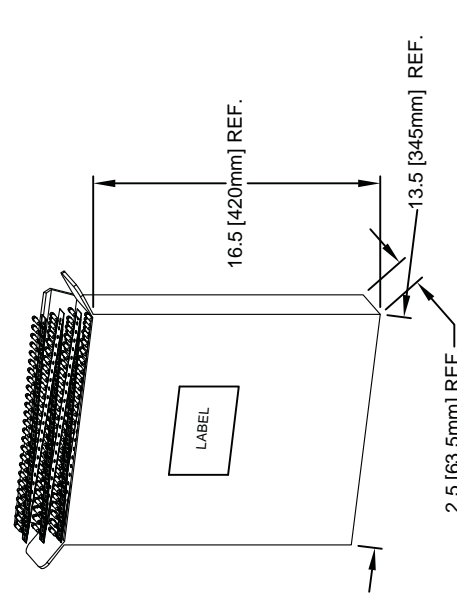
PART NO: ELM1XXX5XX
 CAGE CODE: 32559 SHEET # 4 OF 5

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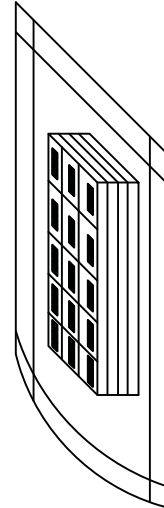
REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET #1		



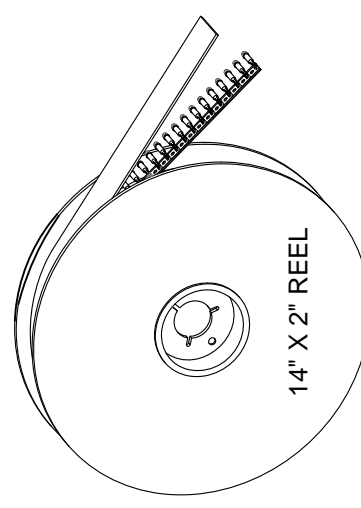
DIRECTION OF FEED →



AMMO PACK
2,000 pcs / box



STANDARD PACKAGING TRAY



TAPE & REEL
1,000 pcs / reel

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)	DECIMALS	.X ± .1
	ANGULAR	X° ± 1°
TITLE:	EXTRUDED VERTICAL T-14 (5mm) LED NARROW PROFILE ASSY	
	PART NO:	ELM1XXX5XX
DESIGNED:	M. Doan	DATE: 07/26/12
CHECKED:	T. Yin	DATE: 07/26/12
CAGE CODE : 32559		SHEET # 5 OF 5
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- NOTE:
- STANDARD PART NUMBERS ARE PACKAGED IN LOOSE PIECES USING PACKAGING TRAYS
 - ADD "T" SUFFIX TO PART NUMBER FOR TAPE AND REEL PACKAGING OPTION (1,000 PCS/REEL)
 - ADD "A" SUFFIX TO PART NUMBER FOR AMMO PACK OPTION (2,000 PCS/BOX)
 - TAPE AND REEL PACKAGING COMPLY TO EIA-468-C