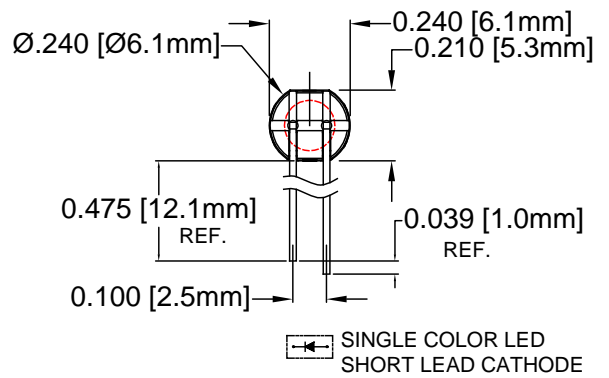
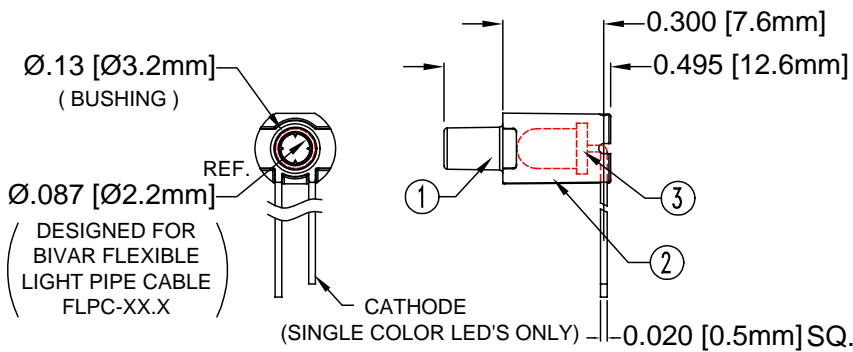
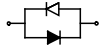


ITEM	Q'TY	PART NUMBER	PART DESCRIPTION
1	1	PML3-1	FLEXIBLE LIGHT-PIPE HOLDER, BUSHING
2	1	PML3-2	FLEXIBLE LIGHT-PIPE HOLDER, BODY
3	1	3XX-XX-F	T-1 (3mm) LED FLANGED, SEE PAGE 2 & 3.

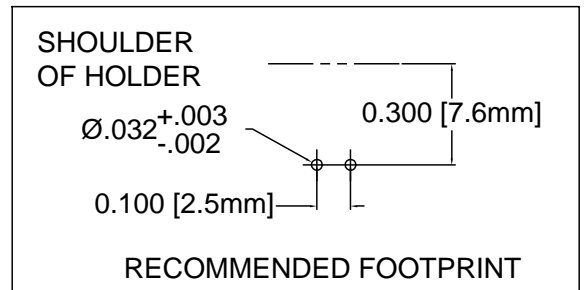
REV.	DESCRIPTION	DATE	APPROVED
A	Engineering Release.	04/04/03	M. C.
B	ECO#381, ADDED SUPER AMBER	04/21/03	M. C.
C	ADDED FLPR-BC-A/G	05/15/03	M. C.
D	REPLACE PML3, LED HOLDER, WITH PML3-12	10/21/03	M. C.
E	Replace PML3, LED Holder, with PML3-12, corrected bicolor LED from 3BC-XX Series to 3BCC-XX series. Added 3SBCC-XX Series.	05/11/04	M. C.



BI-COLOR LED'S



SHORT LEAD CATHODE	LED PART NO.	LONG LEAD CATHODE
RED	3xBCC-F	GREEN
YELLOW	3xBCC-Y/G-F	GREEN
RED	3xBCC-R/Y-F	YELLOW
AMBER	3xBCC-A/G-F	GREEN



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®	
DECIMALS	ANGULAR	4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
.X ±.1	X° ±1°	TITLE: FLEXIBLE LIGHT PIPE ADAPTER, RIGHT ANGLE, W/LED	
.XX ±.02			
.XXX ±.010			
DESIGNED: David Green	DATE: 04/04/03	PART NO: FLPR-XX	REVISION: E
CHECKED: M. Chen	DATE: 04/04/03	CAGE CODE: 32559	SHEET # 1 OF 3
CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.			

REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

FLPR-XX PART NO.	LED Part No.	Chip			Lens Appearance	Absolute Max. Ratings				Electro-Optical Data @ 20ma			Viewing Angle 2 $\theta$ $\frac{1}{2}$ (Deg)
		Material	Peak Wave Length $\lambda_p$ (nm)	Emitted Color		$\Delta\lambda$ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)	
										TYP	MAX	TYP	
FLPR-SG	3SGC-F	GaP/GaP	568	SUPER GREEN	WATER CLEAR	30	80	30	150	2.2	2.6	120	30
FLPR-SY	3SYC-F	GaAsP/GaP	585	SUPER YELLOW	WATER CLEAR	35	80	30	150	2.1	2.6	65	30
FLPR-SA	3SAC-F	AlGaInP	620	SUPER AMBER	WATER CLEAR	17	100	30	150	2.0	2.6	350	30
FLPR-SR	3SRC-F	GaAlAsP/GaAs	660	SUPER RED	WATER CLEAR	20	80	20	150	1.7	2.6	250	30

FLPR-XX PART NO.	LED Part No.	Chip			Lens Appearance	Absolute Max. Ratings				Electro-Optical Data @ 20ma			Viewing Angle 2 $\theta$ $\frac{1}{2}$ (Deg)
		Material	Peak Wave Length $\lambda_p$ (nm)	Emitted Color		$\Delta\lambda$ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)	
										Typ.	Max.	Typ.	
FLPR-UBW.6K	3UBWC-0.6K-F	InGaN/SiC	466	BLUE	WATER CLEAR	26	76	50	150	3.5	4.5	600	20
FLPR-UT	3UTC-F	InGaN/SiC	502	TURQUOISE	WATER CLEAR	30	70	30	150	3.5	4.5	900	20
FLPR-UG	3UGC-F	InGaAlP	563	GREEN	WATER CLEAR	11	100	30	150	2.2	2.6	800	30
FLPR-SUG	3SUGC-F	InGaAlP	574	GREEN	WATER CLEAR	22	100	30	150	2.2	3.0	1000	30
FLPR-UY	3UYC-F	InGaAlP	588	YELLOW	WATER CLEAR	15	100	30	150	2.0	2.6	600	20
FLPR-SUY	3SUYC-F	InGaAlP	592	YELLOW	WATER CLEAR	15	100	30	150	2.0	2.6	1000	30
FLPR-UUY	3UUYC-F	InGaAlP	592	YELLOW	WATER CLEAR	15	100	30	150	2.1	2.6	2000	30
FLPR-UO	3UOC-F	AlGaInP	620	ORANGE	WATER CLEAR	17	100	30	150	2.2	2.6	1500	30
FLPR-SUO	3SUOC-F	InGaAlP	633	ORANGE	WATER CLEAR	17	100	30	150	2.2	2.6	2200	30
FLPR-UR	3URC-F	GaAlAs/GaAs	660	RED	WATER CLEAR	20	60	30	150	1.7	2.6	400	30
FLPR-SUR	3SURC-F	GaAlAs/GaAs	660	RED	WATER CLEAR	20	65	30	150	2.0	2.6	600	30
FLPR-UW.6K	3UWC-0.6K-F	InGaN/SiC	X=.29 Y=.30	WHITE	WATER CLEAR	X	76	50	150	3.5	4.5	600	20


STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) $\pm 10\%$ ALL VALUES. ANGULAR X° $\pm 5^\circ$		 <b>BIVAR</b> <sup>®</sup> 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
			
DESIGNED: <b>David Green</b>	DATE: <b>04/04/03</b>	TITLE: FLEXIBLE LIGHT PIPE ADAPTER, RIGHT ANGLE, W/LED	
CHECKED: <b>M. Chen</b>	DATE: <b>04/04/03</b>	PART NO: <b>FLPR-XX</b>	REVISION: <b>E</b>
		CAGE CODE : <b>32559</b>	SHEET # <b>2 OF 3</b>
CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.			

REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

FLPR-XX PART NO.	LED Part No.	Chip			Lens Appearance	Absolute Max. Ratings				Electro-Optical Data @ 20ma			Viewing Angle 2 θ ½ (Deg)
		Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)	
										TYP	MAX		
FLPR-BC	3BCC-F	GaAsP/GaP	635	HE RED	WATER CLEAR	45	80	30	150	2.0	2.6	65.0	45
		GaP/GaP	568	GREEN		30	80	30	150	2.2	2.6	65.0	
FLPR-BC-Y/G	3BCC-Y/G-F	GaAsP/GaP	585	YELLOW	WATER CLEAR	35	80	30	150	2.1	2.6	50.0	45
		GaP/GaP	568	GREEN		30	80	30	150	2.2	2.6	60.0	
FLPR-BC-R/Y	3BCC-R/Y-F	GaAsP/GaP	585	YELLOW	WATER CLEAR	35	80	30	150	2.1	2.6	50.0	45
		GaAsP/GaP	635	HE RED		30	80	30	150	2.2	2.6	60.0	
FLPR-BC-A/G	3BCC-A/G-F	GaAsP/GaP	610	AMBER	WATER CLEAR	35	80	30	150	2.1	2.6	50.0	45
		GaP/GaP	568	GREEN		30	80	30	150	2.2	2.6	60.0	

FLPR-XX PART NO.	LED Part No.	Chip			Lens Appearance	Absolute Max. Ratings				Electro-Optical Data @ 20ma			Viewing Angle 2 θ ½ (Deg)
		Material	Peak Wave Length λp(nm)	Emitted Color		Δλ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)	
										TYP	MAX		
FLPR-SBC	3SBCC-F	GaAlAsP/GaAs	660	SUPER RED	WATER CLEAR	20	60	30	150	1.8	2.6	150	35
		GaP/GaP	568	HE GREEN		30	80	30	150	2.2	2.6	80	
FLPR-SBC-Y/G	3SBCC-Y/G-F	GaAsP/GaP	590	SUPER YELLOW	WATER CLEAR	15	100	30	150	2.0	2.6	400	35
		GaP/GaP	568	HE GREEN		30	100	30	150	2.2	2.6	80	
FLPR-SBC-R/Y	3SBCC-R/Y-F	GaAlAsP/GaAs	660	SUPER RED	WATER CLEAR	20	60	30	150	1.8	2.6	150	35
		GaAsP/GaP	590	SUPER YELLOW		15	100	30	150	2.0	2.6	400	



STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) ±10% ALL VALUES		ANGULAR X° ± 5°		 <b>BIVAR</b> <sup>®</sup> 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DESIGNED: <b>David Green</b>		DATE: <b>04/04/03</b>			
CHECKED: <b>M. Chen</b>		DATE: <b>04/04/03</b>		PART NO: <b>FLPR-XX</b>	
				REVISION: <b>E</b>	
				CAGE CODE : 32559 SHEET # 3 OF 3	
CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.					