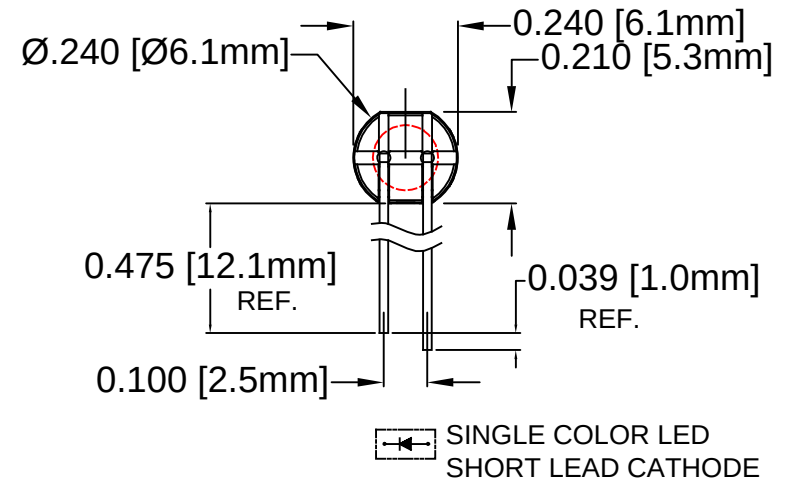
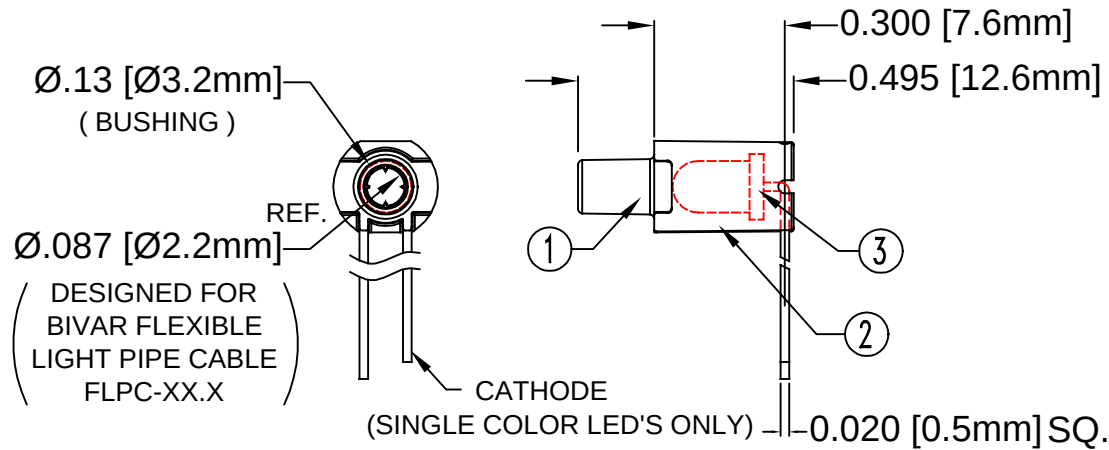
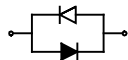


ITEM	Q'TY	PART NUMBER	PART DESCRIPTION
1	1	PML3-1	FLEXIBLE LIGHT-PIPE HOLDER, BUSHING
2	1	PML3-2	FLEXIBLE LIGHT-PIPE HOLDER, BODY
3	1	3XX-XX-F	T-1 (3mm) LED FLANGED, SEE PAGE 2 & 3.

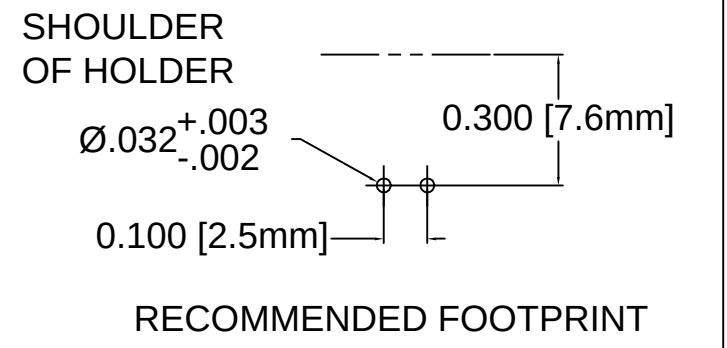
REV.	DESCRIPTION	DATE	APPROVED
A	Engineering Release.	04/04/03	M. C.
B	ECO#381, ADDED SUPER AMBER	04/21/03	M. C.
C	ADDED FLPR-BC-A/G	05/15/03	M. C.
D	REPLACE PML3, LED HOLDER, WITH PML3-12	10/21/03	M. C.
E	Replace PML3, LED Holder, with PML3-12, corrected bicolor LED from 3BC-XX Series to 3BCC-XX series.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

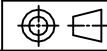
REVERSE VOLTAGE _____ 5V
 REVERSE CURRENT (VR=5V) _____ 100µA
 OPERATING TEMPERATURE RANGE _____ -25°C ~ 85°C
 STORAGE TEMPERATURE _____ -30°C ~ 100°C
 LEAD SOLDERING TEMPERATURE (1/16" FROM BODY) _____ 260°C for 5 Seconds

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) DECIMALS ANGULAR .X ± .1 X° ± 1° .XX ± .02 .XXX ± .010		BIVAR® 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DESIGNED: David Green	DATE: 04/04/03	TITLE: FLEXIBLE LIGHT PIPE ADAPTER, RIGHT ANGLE, W/LED 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 θ ½ (Deg)
		Material	Peak Wave Length λp(nm)	Emitted Color		Δ λ (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	GaAiAsP/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 θ ½ (Deg)
		Material	Peak Wave Length λp(nm)	Emitted Color		Δ λ (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) <u>±10% ALL VALUES</u> <u>ANGULAR</u> X° ± 5°		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
		TITLE: FLEXIBLE LIGHT PIPE ADAPTER, RIGHT ANGLE, W/LED	
DESIGNED: David Green	DATE: 04/04/03	PART NO: FLPR-XX	REVISION: E
CHECKED: M. Chen	DATE: 04/04/03	CAGE CODE : 32559	SHEET # 2 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 Θ ½ (Deg)
		Material	Peak Wave Length λp(nm)	Emitted Color		Δ λ (nm)	Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)	
										TYP	MAX	TYP	
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	TYP	
FLPR-SBC	3SBCC-F	GaAiAsP/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	GaAiAsP/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) <u>±10% ALL VALUES</u> <u>ANGULAR</u> X° ± 5°		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
		TITLE: FLEXIBLE LIGHT PIPE ADAPTER, RIGHT ANGLE, W/LED	
DESIGNED: David Green	DATE: 04/04/03	PART NO: FLPR-XX	REVISION: E
CHECKED: M. Chen	DATE: 04/04/03	CAGE CODE : 32559	SHEET # 3 OF 3
CAD GENERATED DOCUMENT, DO NOT MEASURE DRAWING.			