

REV.	DESCRIPTION	DATE	APPROVED
A	Engineering Release	04/09/07	M. C.
B	Updated Notes	09/07/07	M. C.
C	Connector Shipped Separate Note Update.	11/08/07	M. C.
D	Added 3YCL LED to Page 3	02/06/08	M. C.
E	Updated BOM item #1 and Updated LED Offering	11/12/12	T. Y.
F	Updated LED P/N to 3XXX-S in BOM	12/19/12	T. Y.

Technical drawing of the LED module showing side and top views with dimensions and callouts.

Dimensions:

- LED diameter: $\varnothing.118$ [$\varnothing 3.0\text{mm}$]
- LED height: 0.140 [3.6mm]
- LED width: 0.030 [0.8mm]
- Flange diameter: $\varnothing.190$ [$\varnothing 4.8\text{mm}$]
- Body diameter: $\varnothing.155$ [$\varnothing 3.9\text{mm}$]
- Module length: 0.420 [10.7mm]
- Module width: 0.11 [2.8mm]
- Module height: 0.55 [14.0mm]
- Module width (bottom): 0.10 [2.54mm]
- Module width (bottom): 0.10 [2.5mm]
- Module width (bottom): 0.20 [5.1mm]
- Module length (bottom): X.X*

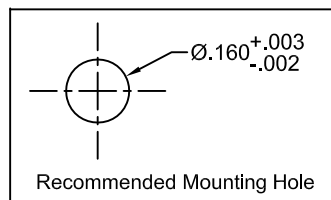
Callouts:

- ①: LED
- ②: LED
- ③: LED
- ④: LED
- ⑤: LED
- ⑥: LED

Wiring Diagrams:

- Single Color:** (+) Red Wire, (-) Black Wire. Pin 1 is Red, Pin 2 is Black.
- 5V or 12V:** (+) Red Wire, (-) Black Wire. Pin 1 is Red, Pin 2 is Black.
- Bi-Color:** Pin 1 is Red, Pin 2 is Black.

BI-COLOR POLARITY		
LED P/N	(1) Cathode	(2) Cathode
3BC	Green	Red
3BC-Y/G	Green	Yellow
3BC-R/Y	Yellow	Red
3BC-A/G	Green	Amber



EXAMPLE:

PM3RDW6.5*CC

- Connector
- Wire Length "X"
- LED Color & Lens Appearance.
- Series

* X.X = Wire Length "X"

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) <u>DECIMALS</u> .X ± .1 .XX ± .02 .XXX ± .010 <u>ANGULAR</u> X° ± 1°		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DESIGNED: Dan Beckman DATE: 04/09/07		PART NO: PM3XXXWX.X-CC REVISION: F	
CHECKED: T. Yin DATE: 04/09/07		CAGE CODE : 32559 SHEET # 1 OF 4	
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REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

LED Assy.No.	Chip			Lens Appearance	Electro-Optical Data @20mA				Viewing Angle 2 θ 1/2 (Deg)	LED P/N
	Material	Peak Wave Length	Emitted Color		If (mA)	Vf (V)		Iv (mcd)		
					MAX	TYP	MAX	TYP		
PM3BWCWX.X-CC	GaN/SiC	430	BLUE	WATER CLEAR	25	4	4.5	25	30	3BWC0S
PM3BWDWX.X-CC	GaN/SiC	430	BLUE	DIFFUSED	25	4	4.5	10	40	3BWD0S
PM3BWTWX.X-CC	GaN/SiC	430	BLUE	TINTED	25	4	4.5	25	30	3BWT-S
PM3GCWX.X-CC	GaP/GaP	568	GREEN	WATER CLEAR	30	2.1	2.8	40	30	3GC-S
PM3GDWX.X-CC	GaP/GaP	568	GREEN	DIFFUSED	30	2.1	2.8	25	40	3GD-S
PM3GTWX.X-CC	GaP/GaP	568	GREEN	TINTED	30	2.1	2.8	40	30	3GT-S
PM3PGCWX.X-CC	GaP/GaP	555	PURE GREEN	WATER CLEAR	30	2.2	2.8	10	30	3PGC-S
PM3PGDWX.X-CC	GaP/GaP	555	PURE GREEN	DIFFUSED	30	2.2	2.8	5	40	3PGD-S
PM3PGTWX.X-CC	GaP/GaP	555	PURE GREEN	TINTED	30	2.2	2.8	10	30	3PGT-S
PM3YCWX.X-CC	GaAsp/GaP	590	YELLOW	WATER CLEAR	30	2	2.8	40	30	3YC-S
PM3YDWX.X-CC	GaAsp/GaP	590	YELLOW	DIFFUSED	30	2	2.8	20	40	3YD-S
PM3YTWX.X-CC	GaAsp/GaP	590	YELLOW	TINTED	30	2	2.8	40	30	3YT-S
PM3ACWX.X-CC	GaAsp/GaP	605	AMBER	WATER CLEAR	30	2	2.8	40	30	3AC-S
PM3ADWX.X-CC	GaAsp/GaP	605	AMBER	DIFFUSED	30	2	2.8	25	40	3AD-S
PM3ATWX.X-CC	GaAsp/GaP	605	AMBER	TINTED	30	2	2.8	40	30	3AT-S
PM3HCWX.X-CC	GaAsp/GaP	625	HE RED	WATER CLEAR	30	2	2.8	50	30	3HC-S
PM3HDWX.X-CC	GaAsp/GaP	625	HE RED	DIFFUSED	30	2	2.8	30	40	3HD-S
PM3HTWX.X-CC	GaAsp/GaP	625	HE RED	TINTED	30	2	2.8	50	30	3HT-S
PM3RCWX.X-CC	GaP/GaP	700	RED	WATER CLEAR	20	2	2.8	2.5	30	3RC-S
PM3RDWX.X-CC	GaP/GaP	700	RED	DIFFUSED	20	2.1	2.8	2	40	3RD-S
PM3RTWX.X-CC	GaP/GaP	700	RED	TINTED	20	2.1	2.8	2.5	30	3RT-S
PM3BCWX.X-CC-A/G	GaAsp/GaP	605	AMBER	DIFFUSED	30	2	2.8	6	45	3BC-A/G
	GaP/GaP	568	GREEN		30	2.1	2.8	6		
PM3BCWX.X-CC	GaAsp/GaP	625	RED	DIFFUSED	30	2	2.8	6	45	3BC
	GaP/GaP	568	GREEN		30	2.1	2.8	6		
PM3BCWX.X-CC-R/Y	GaAsp/GaP	625	RED	DIFFUSED	30	2	2.8	6	45	3BC-R/Y
	GaAsp/GaP	590	YELLOW		30	2	2.8	4		
PM3BCWX.X-CC-Y/G	GaAsp/GaP	590	YELLOW	DIFFUSED	30	2	2.8	4	45	3BC-Y/G
	GaP/GaP	568	GREEN		30	2.1	2.8	6		

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED) <u>±10% ALL VALUES</u>		ANGULAR X° ± 5°		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
				TITLE: T-1 (3mm) PANEL MOUNT ASSEMBLY	
DESIGNED: Dan Beckman	DATE: 04/09/07	PART NO: PM3XXXWX.X-CC		REVISION: F	
CHECKED: T. Yin	DATE: 04/09/07	CAGE CODE : 32559		SHEET # 2 OF 4	
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REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

LED Assy.No.	Chip			Lens Appearance	Electro-Optical Data @20mA				Viewing Angle 2 θ 1/2 (Deg)	LED P/N
	Material	Peak Wave Length	Emitted Color		If (mA)	Vf (V)		Iv (mcd)		
						MAX	TYP			
PM3UBWCWX.X-CC	GaN/SiC	470	BLUE	WATER CLEAR	30	4	4.5	400	30	3UBWC-0.6K
PM3SGCWX.X-CC	GaP/GaP	568	GREEN	WATER CLEAR	30	2.1	2.8	50	30	3SGC-S
PM3SGDWX.X-CC	GaP/GaP	568	GREEN	DIFFUSED	30	2.1	2.8	30	40	3SGD-S
PM3SGTWX.X-CC	GaP/GaP	568	GREEN	TINTED	30	2.1	2.8	50	30	3SGT-S
PM3SYCWX.X-CC	GaAsp/GaP	590	YELLOW	WATER CLEAR	30	2	2.8	50	30	3SYC-S
PM3SYDWX.X-CC	GaAsp/GaP	590	YELLOW	DIFFUSED	30	2	2.8	30	40	3YD-S
PM3SYTWX.X-CC	GaAsp/GaP	590	YELLOW	TINTED	30	2	2.8	50	30	3SYT-S
PM3SACWX.X-CC	AlGaInP	605	AMBER	WATER CLEAR	30	1.8	2.4	300	30	3SAC-S
PM3SADWX.X-CC	AlGaInP	605	AMBER	DIFFUSED	30	1.8	2.4	100	40	3SAD-S
PM3SATWX.X-CC	AlGaInP	605	AMBER	TINTED	30	1.8	2.4	300	30	3SAT-S
PM3SRCWX.X-CC	GaAls/GaAs	645	SUPER RED	WATER CLEAR	30	1.7	2.4	60	30	3SRC-S
PM3SRDWX.X-CC	GaAls/GaAs	645	SUPER RED	DIFFUSED	30	1.7	2.4	40	40	3SRD-S
PM3SRTWX.X-CC	GaAls/GaAs	645	SUPER RED	TINTED	30	1.7	2.4	60	30	3SRT-S
PM3UGCWX.X-CC	AlGaInP	570	GREEN	WATER CLEAR	30	2.1	2.4	200	30	3UGC-S
PM3SUGCWX.X-CC	AlGaInP	570	GREEN	WATER CLEAR	30	2.1	2.4	300	30	3SUGC-S
PM3UYCWX.X-CC	AlGaInP	590	YELLOW	WATER CLEAR	30	2	2.4	300	30	3UYC-S
PM3SUYCWX.X-CC	AlGaInP	590	YELLOW	WATER CLEAR	30	2	2.4	400	30	3SUYC-S
PM3UUYCWX.X-CC	AlGaInP	590	YELLOW	WATER CLEAR	30	2	2.4	600	30	3UUYC-S
PM3UOCWX.X-CC	AlGaInP	625	ORANGE	WATER CLEAR	30	1.8	2.4	300	30	3UOC-S
PM3SUOCWX.X-CC	AlGaInP	625	ORANGE	WATER CLEAR	30	1.8	2.4	400	30	3SUOC-S
PM3URCWX.X-CC	GaAlAs/GaAs	645	RED	WATER CLEAR	30	1.7	2.4	200	30	3URC-S
PM3SURCWX.X-CC	AlGaInP	640	RED	WATER CLEAR	30	1.8	2.4	200	30	3SURC-S
PM3UWCWX.X-CC	InGaN/Sappire	6500K	WHITE	WATER CLEAR	30	3.4	3	1000	30	3UWC1.030C

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				TITLE: T-1 (3mm) PANEL MOUNT ASSEMBLY	
DESIGNED: Dan Beckman	DATE: 04/09/07	PART NO: PM3XXXWX.X-CC		REVISION F	
CHECKED: T. Yln	DATE: 04/09/07	CAGE CODE : 32559		SHEET # 3 OF 4	
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REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET#1.		

LED Assy.No.	Chip			Lens Appearance	Absolute Max. Ratings			Electro-Optical Data @2mA			Viewing Angle 2 θ 1/2 (Deg)	LED P/N
	Material	Peak Wave Length λp(nm)	Emitted Color		Pd (mW)	If (mA)	Peak If(mA)	Vf (V)		Iv (mcd)		
PM3BWDLWX.X-CC	GaN/siC	430	BLUE	DIFFUSED	20	7	-	3.8	4.2	2.5	40	3BWDL-S
PM3GDLWX.X-CC	GaP/GaP	568	GREEN	DIFFUSED	10	7	-	2.1	2.6	2	40	3GDL-S
PM3PGDLWX.X-CC	GaP/GaP	555	PURE GREEN	DIFFUSED	10	7	-	2.1	2.6	0.2	40	3PGDL-S
PM3YDLWX.X-CC	GaP/GaP	590	YELLOW	DIFFUSED	10	7	-	2	2.6	2	40	3YDL-S
PM3ADLWX.X-CC	GaP/GaP	605	AMBER	DIFFUSED	10	7	-	2	2.6	4	40	3ADL-S
PM3HDLWX.X-CC	GaP/GaP	625	HE RED	DIFFUSED	10	7	-	2	2.6	2.5	40	3HDL-S
PM3RDLWX.X-CC	GaP/GaP	700	RED	DIFFUSED	10	7	-	2.1	2.6	0.5	40	3RDL-S
PM3SRDLWX.X-CC	GaAlAs/GaAs	645	RED	DIFFUSED	10	7	-	2	-	8	40	3SRDL-S

Assembly P/N	Peak Wave Length λp(nm)	Emitted Color	Lens Appearance	Electro-Optical Data				Viewing Angle 2 θ 1/2 (Deg)	LED P/N
				If (mA)	Vf (V)		Iv (mcd)		
					MAX	TYP			
5 Volt				Data @ 5V					
PM3BWD5VWX.X-CC	430	BLUE	DIFFUSED	-	-	5	10	35	3BWD5V-S
PM3GC5VWX.X-CC	568	GREEN	WATER CLEAR	-	-	5	40	20	3GC5V-S
PM3GD5VWX.X-CC	568	GREEN	DIFFUSED	-	-	5	25	35	3GD5V-S
PM3GT5VWX.X-CC	568	GREEN	TINTED	-	-	5	40	20	3GT5V-S
PM3AD5VWX.X-CC	605	AMBER	DIFFUSED	-	-	5	25	35	3AD5V-S
PM3HD5VWX.X-CC	625	HE RED	DIFFUSED	-	-	5	30	35	3HD5V-S
PM3RD5VWX.X-CC	700	RED	DIFFUSED	-	-	5	2	35	3RD5V-S
PM3YD5VWX.X-CC	590	YELLOW	DIFFUSED	-	-	5	20	35	3YD5V-S
12 Volt				Data @ 12V					
PM3GC12VWX.X-CC	568	GREEN	WATER CLEAR	-	-	12	40	20	3GC12V-S
PM3GD12VWX.X-CC	568	GREEN	DIFFUSED	-	-	12	25	35	2GD12V-S
PM3HC12VWX.X-CC	625	HE RED	WATER CLEAR	-	-	12	50	20	3HC12V-S
PM3HD12VWX.X-CC	625	HE RED	DIFFUSED	-	-	12	30	35	3HD12V-S
PM3RC12VWX.X-CC	700	RED	WATER CLEAR	-	-	12	6	20	3RC12V-S
PM3RD12VWX.X-CC	700	RED	DIFFUSED	-	-	12	2	35	3RD12V-S
PM3YC12VWX.X-CC	590	YELLOW	WATER CLEAR	-	-	12	40	20	3YC12V-S
PM3YD12VWX.X-CC	590	YELLOW	DIFFUSED	-	-	12	25	35	3YD12V-S

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				TITLE: T-1 (3mm) PANEL MOUNT ASSEMBLY	
DESIGNED: Dan Beckman	DATE: 04/09/07	PART NO: PM3XXXWX.X-CC		REVISION: F	
CHECKED: T. Yin	DATE: 04/09/07	CAGE CODE : 32559		SHEET # 4 OF 4	
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