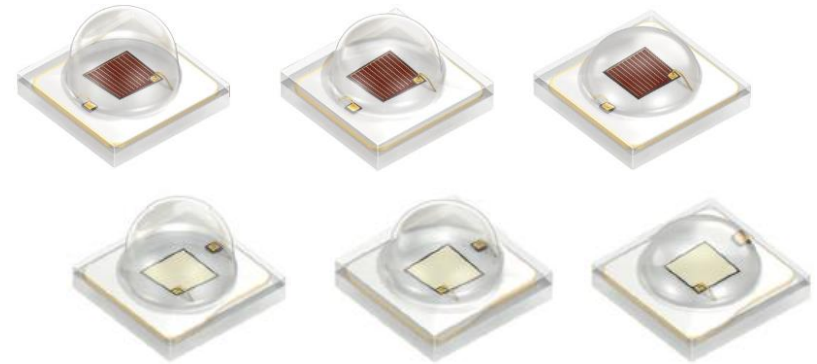


New Generation OSLON SSL Colors Gx CSxPMx.xx



Product Presentation

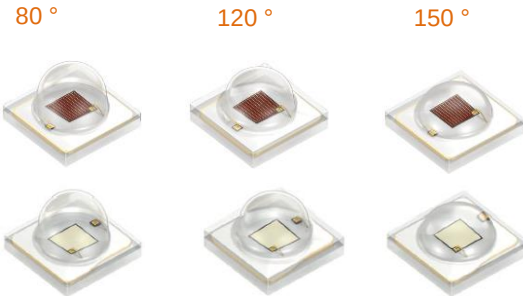


-
1. Product Positioning
 2. Product Overview
 3. Target Application
 4. Performance Overview/ Distribution
 5. LM-80 status
 6. Competition Landscape
-

OSLON® SSL Color

Product Positioning

1W ceramic based saturated color LED



Customer benefits/Unique Selling Points:

- Available in 80°, 120° and 150° viewing angle of choice
- Specific wavelength for Horticultural lighting
- Regular color for architectural and smart lighting

How does this product fits into our portfolio?

- Extending while 1W ceramic portfolio into saturated color to cater for specific application
- Target application: Horticultural lighting, Architectural lighting

OSLON SSL COLOR



Architectural lighting: Broad color portfolio

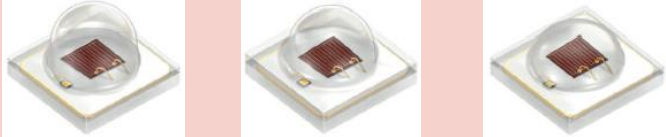
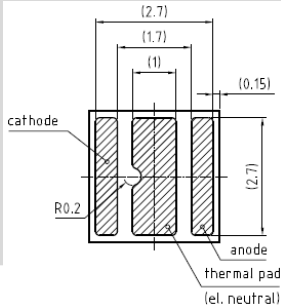
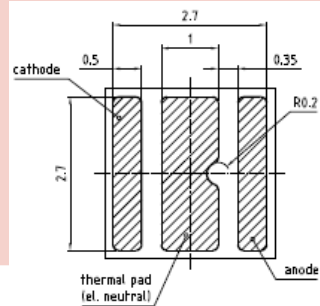


Horticultural lighting

OSLON® SSL Colors – Gx CSxPMx.xx

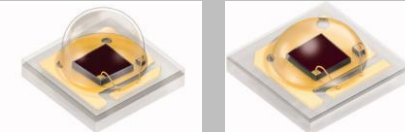
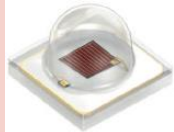
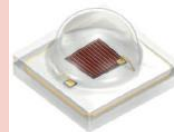
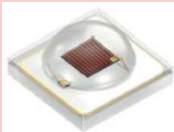
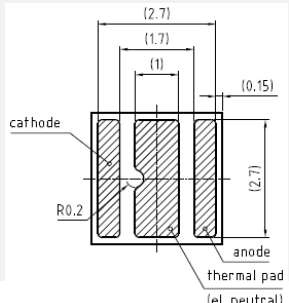
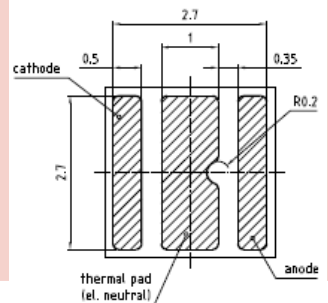
Product Overview



	Existing	New Gen
Far Red (L _{peak} 730 nm)		
Device Designation	GF CS8PM1.24 (80 °) GF CSHPM1.24 (150 °)	GF CS8PM2.24 (80 °) GF CSSPM1.24 (120 °) GF CSHPM2.24 (150 °)
Lens material	XXX	XXX
Ceramic Panel	Fume panel	Race panel
Thermal pad marking	Cathode 	Anode 

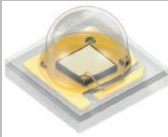
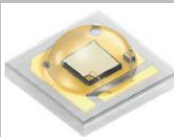
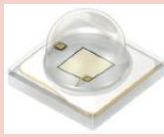
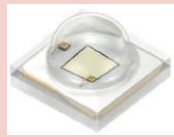
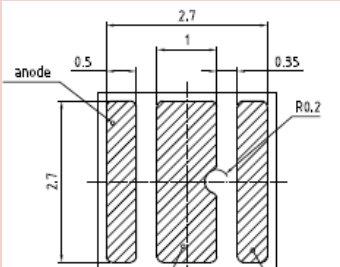
OSLON® SSL Colors – Gx CSxPMx.xx

Product Overview

	Existing (Lx CxxP)		New Gen (Gx CSxPMx.xx)		
Hyper Red (L _{peak} 660 nm) Red (L _{peak} 634 nm) Amber (L _{peak} 625 nm) Yellow (L _{peak} 593 nm)					
Device Designation	80 °	150 °	80 °	120 °	150 °
Hyper Red	LH CP7P	LH CPDP	GH CS8PM1.24	GH CSSPM1.24	GH CSHPM1.24
Red	LR CP7P	LR CPDP	GR CS8PM1.23	N/A	GR CSHPM1.23
Amber	LA CP7P	LA CPDP	GA CS8PM1.23	GA CSSPM1.23	GA CSHPM1.23
Yellow	LY CP7P	LY CPDP	GY CS8PM1.23	N/A	GY CSHPM1.23
Lens material	xxx		xxx		
Ceramic Panel	Fume panel		Race panel		
Thermal pad marking	Cathode		Anode		
					

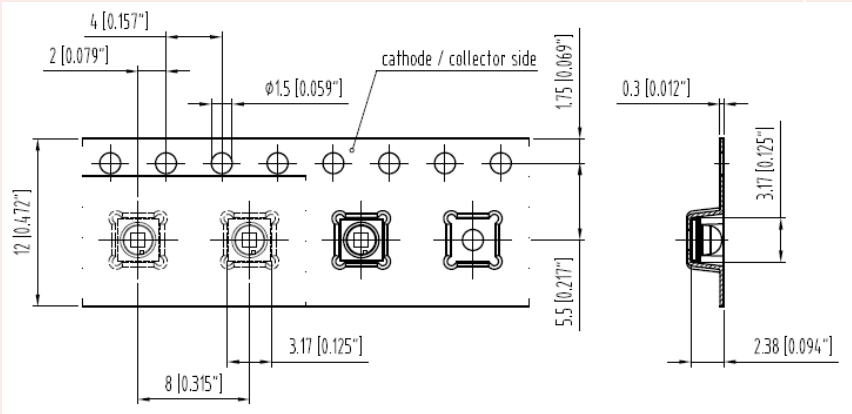
OSLON® SSL Colors – Gx CSxPMx.xx

Product Overview

	Existing (Lx CxxP)		New Gen (Gx CSxPMx.xx)		
True Green (L _{peak} 521 nm) Blue (L _{peak} 465 nm) Deep Blue (L _{peak} 451 nm)					
Device Designation	80 °	150 °	80 °	120 °	150 °
True Green	LT CP7P	LT CPDP	GT CS8PM1.13	GT CSSPM1.13	GT CSHPM1.13
Blue	LB CP7P	LB CPDP	GB CS8PM1.13	N/A	GB CSHPM1.13
Deep Blue	LD CQ7P	LD CQDP	GD CS8PM1.14	GD CSSPM1.14	GD CSHPM1.14
Lens	xxx		xxx		
True Green Blue and Deep Blue					
Ceramic Panel	Fume panel		Race panel		
Thermal pad marking	Cathode				
					

OSLON® SSL Colors – Gx CSxPMx.xx

Product Overview

	Existing (Lx CxxP)	New Gen (Gx CSxPMx.xx)	Improvement
Color	Typ Flux/ Radiant Power	Typ Flux/ Radiant Power	Flux
Far Red	260 mW	270 mW	4 %
Hyper Red	367 mW	425 mW	16 %
Red	62 lm	68 lm	10 %
Amber	84 lm	100 lm	19 %
Yellow	68 lm	76 lm	12 %
True Green	100 lm	130 lm	30 %
Blue	28 lm	30 lm	7 %
Deep Blue	600 mW	690 mW	15 %
Taping			

OSLON® SSL Colors – Gx CSxPMx.xx

Target Application

- Horticultural Lighting
- Architectural Lighting
- Stage lighting
- Smart bulb

Application	Horticultural	Architectural
Example (Photo)		

OSLON® SSL Colors – Gx CSxPMx.xx

Performance Distribution

Device	GF CS8PM2.24 GF CSSPM1.24 GF CSHPM2.24	 Far Red 730 nm
Flux group	Min flux	
1T	280 mW	
4S	250 mW	D
3S	224 mW	D
2S	201 mW	

Device	GH CS8PM1.24 GH CSSPM1.24 GH CSHPM1.24	 Hyper Red 660 nm
Flux group	Min flux	
2U	500 mW	
1U	450 mW	
4T	400 mW	D
3T	355 mW	D

D = Datasheet

Device	GR CS8PM1.23 GR CSSPM1.23 GR CSHPM1.23	 Red 623 nm
Flux group	Min flux	
KQ	76.3 lm	
KP	71.0 lm	
JU	65.8 lm	D
JT	61.0 lm	D

Device	GA CS8PM1.23 GA CSSPM1.23 GA CSHPM1.23	 Amber 617 nm
Flux group	Min flux	
LP	112 lm	
KU	104 lm	
KT	97 lm	D
KS	89.2 lm	D

OSLON® SSL Colors – Gx CSxPMx.xx

Performance Distribution

Device	GY CS8PM1.23 GY CSHPM1.23	 Yellow 590 nm
Flux group	Min flux	
KR	82.0 lm	
KQ	76.3 lm	D
KP	71.0 lm	D
JU	65.8 lm	

Device	GT CS8PM1.13 GT CSSPM1.13 GT CSHPM1.13	 True Green 528 nm
Flux group	Min flux	
LS	140 lm	
LR	130 lm	D
LQ	121 lm	D
LP	112 lm	

D = Datasheet

Device	GB CS8PM1.13 GB CSHPM1.13	 Blue 470 nm
Flux group	Min flux	
HZ	39 lm	
HY	33 lm	
HX	28 lm	D
GZ	24 lm	D

Device	GD CS8PM1.14 GD CSSPM1.14 GD CSHPM1.14	 Deep Blue 455 nm
Flux group	Min flux	
VK	765 mW	
VJ	710 mW	
UO	660 mW	D
UN	610 mW	D

Many Thanks.