

# OSM5XDE5E1E

VER.C.1

BackView

Tolerance:±0.30mm

Cathode

Φ

Anode

Unit:mm

Cathode(-)

ìc

#### **Features**

- Highest Luminous Flux
- Super Energy Efficiency
- Long Lifetime Operation
- Superior ESD protection
- Superior UV Resistance

#### ■Applications

- Read lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Bollards / Security / Garden
- Traffic signaling / Beacons
- In door / Out door Commercial lights
- Automotive Ext

#### ■Absolute Maximum Rating

		(14-25 0)		
Item	Symbol	Value	Unit	
DC Forward Current	$\mathbf{I}_{\mathbf{F}}$	1400	mA	
Pulse Forward Current*	$I_{\rm FP}$	1800	mA	
Reverse Voltage	V <sub>R</sub>	5	V	
Power Dissipation	PD	6300	mW	
Operating Temperature	Topr	-30 ~ +85	°C	
Storage Temperature	Tstg	-40~ +100	°C	
Lead Soldering Temperature	Tsol	260°C/5sec	-	
*D1 141 M 10 D ( (	1/10			

Directivity

0

d

-14.5

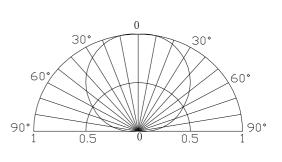
**•**Outline Dimension

t

0

(Ta=25°C)

(Ta=25℃)



\*Pulse width Max.10ms Duty ratio max 1/10

#### Electrical -Optical Characteristics

=Elicentical optical characteristics		(10-	25 07		
Symbol	Condition	Min.	Тур.	Max.	Unit
DC Forward Voltage V <sub>F</sub>	IF=700mA	3.0	3.3	3.8	V
	IF=1400mA	3.3	3.5	4.5	V
IR	V <sub>R</sub> =5V	-	-	10	μA
Luminous Flux $\Phi v$	IF=700mA	150	180	-	lm
	IF=1400mA	280	300	-	1111
CCT	IF=1400mA	2500	3000	3500	K
х	IF=1400mA	-	0.44	-	-
у	IF=1400mA	-	0.41	-	-
201/2	IF=1400mA	-	140	-	deg
	Symbol V <sub>F</sub> I <sub>R</sub> $\Phi$ v CCT x y	$\begin{array}{llllllllllllllllllllllllllllllllllll$	$\begin{array}{ccc} Symbol & Condition & Min. \\ & I_{F}=700mA & 3.0 \\ \hline I_{F}=1400mA & 3.3 \\ \hline I_{R} & V_{R}=5V & - \\ & IF=700mA & 150 \\ \hline 0 V & IF=1400mA & 280 \\ \hline CCT & I_{F}=1400mA & 2500 \\ \hline x & I_{F}=1400mA & - \\ & y & I_{F}=1400mA & - \\ \end{array}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

\*1 Tolerance of measurements of chromaticity coordinates is  $\pm 10\%$ 

\*2 Tolerance of measurements of luminous Flux is  $\pm 15\%$ 

\*3 Tolerance of measurements of forward voltage is  $\pm 0.1$  V

Note: Don't drive at rated current more than 5s without heat sink for Xeon 5 emitter series.

## LED & Application Technologies











Xeon 5 Power Warm White LED

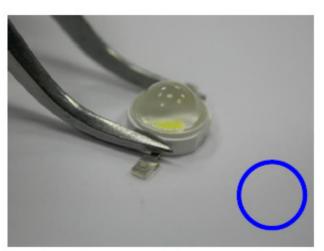
OSM5XDE5E1E VER.C.1

### Handling of Silicone Lens LEDs

Notes for handling of silicone lens LEDs

- Please do not use a force of over 3kgf impact or pressure on the silicone lens, otherwise it will cause a catastrophic failure.
- The LEDs should only be picked up by making contact with the sides of the LED body.
- Avoid touching the silicone lens especially by sharp tools such as Tweezers.
- Avoid leaving fingerprints on the silicone lens.
- Please store the LEDs away from dusty areas or seal the product against dust.
- When populating boards in SMT production, there are basically no restrictions regarding the form of the pick and place nozzle, except that mechanical pressure on the silicone lens must be prevented.
- Please do not mold over the silicone lens with another resin. (epoxy, urethane, etc)





**LED & Application Technologies** 







