



OS-IN-2021-008

**Harmonization of datasheets for OSRAM
OSTAR® Projection Power**

Customer information package

OS QM CQM | 15.03.2021

Light is OSRAM

OS-IN-2021-008

**Harmonization of datasheets for OSRAM OSTAR®
Projection Power**



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1. Reason for change

- To standardize and harmonize datasheets for the OSRAM OSTAR Projection Power product family
- Operating Temperature removed from datasheet to simplify the existing specification. The applied bias is limited by the maximum allowed junction temperature. Kindly refer to application note for more details.
- To increase maximum forward current from 6A to 8A for Red.
- Standardize forward voltage, V_F for blue with Deep blue and converted green product as same chip technology is used.
- Harmonization of electrical thermal resistance and efficiency values within the product family.
- To harmonize radiating surface, peak wavelength and partial flux values for whole product family.

Assessment

- No change in fit and form of the product

3. Changes in the datasheets (1/2):

Updated Datasheet Versions

Product type	Data sheet version <u>before Info Note</u>	Data sheet version <u>after Info Note</u>
LE A P0MQ	1.1	1.2
LE A P1MQ	1.3	1.4
LE A P2MQ	1.1	1.2
LE A P3MQ	1.1	1.2
LE B P0MQ	1.1	1.2
LE B P1MQ	1.2	1.3
LE B P2MQ	1.1	1.2
LE B P3MQ	1.1	1.2

3. Changes in the datasheets (2/2):

Updated Datasheet Versions

Product type	Data sheet version <u>before Info Note</u>	Data sheet version <u>after Info Note</u>
LE D P0MQ	1.2	1.3
LE D P1MQ	1.1	1.2
LE D P2MQ	1.1	1.2
LE D P3MQ	1.1	1.2
LE CG P0AQ	1.2	1.3
LE CG P1AQ	1.1	1.2
LE CG P2AQ	1.2	1.3
LE CG P3AQ	1.2	1.3

3. Changes in the datasheets: Ordering Information

Product type	<u>Current Status</u>	<u>New Status</u>
LE A P0MQ	LE A P0MQ- QRRP -2	LE A P0MQ- QSRQ -2
LE A P1MQ	LE A P1MQ- SPSS -2	LE A P1MQ- SPST -2
LE A P2MQ	LE A P2MQ- TSUP -2	LE A P2MQ- TSUQ -2
LE A P3MQ	LE A P2MQ- TSUQ -2	LE A P3MQ- URVP -2
LE B P0MQ	LE B P0MQ- DREP -23	LE B P0MQ- DSEQ -23
LE B P1MQ	LE B P1MQ- FPFS -23	LE B P1MQ- FPFT -23
LE B P2MQ	LE B P2MQ- GSHR -23	LE B P2MQ- GSHQ -23
LE B P3MQ	LE B P3MQ- HRJQ -23	LE B P3MQ- HRJP -23

Remark: No change in ordering Code

3. Changes in the datasheets: Ordering Information

Product type	<u>Current Status</u>	<u>New Status</u>
LE D P0MQ	LE D P0MQ-EPES-R	LE D P0MQ-EPET-R
LE D P2MQ	LE D P2MQ-GUHS-R	LE D P2MQ-HPHT-R
LE D P1MQ	LE D P1MQ-FSGP-R	LE D P1MQ-FSGQ-R
LE D P3MQ	LE D P3MQ-HTJS-R	LE D P3MQ-HTJR-R
LE CG P0AQ	LE CG P0AQ-SRSU-A	LE CG P0AQ-SQSU-A
LE CG P1AQ	LE CG P1AQ-TUUR-A	LE CG P1AQ-TUUS-A
LE CG P2AQ	LE CG P2AQ-VRVU-A	LE CG P2AQ-VRWP-A
LE CG P3AQ	LE CG P3AQ-WQWT-A	LE CG P3AQ-WQWU-A

Remark: No change in ordering Code

3. Changes in the datasheets: Operating Temperature

Product type	LE A P0MQ; LE B P0MQ; LE D P0MQ; LE CG P0AQ;															
<u>Current Status</u>	<p>Operating Temperature T_{op} max.: 100°C</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left; color: #f4a460;">Maximum Ratings</th> </tr> <tr> <th style="text-align: left;">Parameter</th> <th colspan="2" style="text-align: left;">Symbol</th> <th style="text-align: left;">Values</th> </tr> </thead> <tbody> <tr> <td rowspan="2" style="text-align: left;">Operating Temperature</td> <td style="text-align: left;">T_{op}</td> <td style="text-align: left;">min.</td> <td style="text-align: left;">-40 °C</td> </tr> <tr> <td></td> <td style="text-align: left;">max.</td> <td style="text-align: left;">100 °C</td> </tr> </tbody> </table>	Maximum Ratings				Parameter	Symbol		Values	Operating Temperature	T_{op}	min.	-40 °C		max.	100 °C
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Parameter	Symbol		Values													
Operating Temperature	T_{op}	min.	-40 °C													
		max.	100 °C													
<u>New Status</u>	<p>Operating Temperature removed from datasheet to simplify the existing specification. The applied bias is limited by the maximum allowed junction temperature. Kindly refer to application note for more details.</p>															

3. Changes in the datasheets: Operating Temperature

Product type	LE A P1MQ; LE A P2MQ; LE A P3MQ LE B P1MQ; LE A P2MQ; LE A P3MQ LE D P1MQ; LE D P2MQ; LE D P3MQ LE CG P1AQ; LE CG P2AQ; LE CG P3AQ												
<u>Current Status</u>	Operating Temperature T_{op} max.: 85°C <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left; padding: 5px;">Maximum Ratings</th> </tr> <tr> <th style="text-align: left; padding: 5px;">Parameter</th> <th style="text-align: left; padding: 5px;">Symbol</th> <th style="text-align: left; padding: 5px;">Values</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Operating Temperature</td> <td style="padding: 5px;">T_{op}</td> <td style="padding: 5px;">min. max.</td> <td style="padding: 5px;">-40 °C 85 °C</td> </tr> </tbody> </table>	Maximum Ratings				Parameter	Symbol	Values		Operating Temperature	T_{op}	min. max.	-40 °C 85 °C
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Parameter	Symbol	Values											
Operating Temperature	T_{op}	min. max.	-40 °C 85 °C										
<u>New Status</u>	Operating Temperature removed from datasheet to simplify the existing specification. The applied bias is limited by the maximum allowed junction temperature. Kindly refer to application note for more details.												

3. Changes in the datasheets: Forward Current

Product type	LE A P1MQ; LE A P2MQ; LE A P3MQ															
<u>Current Status</u>	<p>Forward Current I_F max.: 6000mA</p> <table border="1"> <thead> <tr> <th colspan="4">Maximum Ratings</th> </tr> <tr> <th>Parameter</th> <th colspan="2">Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Forward Current</td> <td rowspan="2">I_F</td> <td>min.</td> <td>200 mA</td> </tr> <tr> <td>$T_j = T_{j,max}$</td> <td>max.</td> <td>6000 mA</td> </tr> </tbody> </table>	Maximum Ratings				Parameter	Symbol		Values	Forward Current	I_F	min.	200 mA	$T_j = T_{j,max}$	max.	6000 mA
Maximum Ratings																
Parameter	Symbol		Values													
Forward Current	I_F	min.	200 mA													
$T_j = T_{j,max}$		max.	6000 mA													
<u>New Status</u>	<p>Forward Current I_F max.: 8000mA</p> <table border="1"> <thead> <tr> <th colspan="4">Maximum Ratings</th> </tr> <tr> <th>Parameter</th> <th colspan="2">Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Forward Current</td> <td rowspan="2">I_F</td> <td>min.</td> <td>200 mA</td> </tr> <tr> <td>$T_j = T_{j,max}$</td> <td>max.</td> <td>8000 mA</td> </tr> </tbody> </table>	Maximum Ratings				Parameter	Symbol		Values	Forward Current	I_F	min.	200 mA	$T_j = T_{j,max}$	max.	8000 mA
Maximum Ratings																
Parameter	Symbol		Values													
Forward Current	I_F	min.	200 mA													
$T_j = T_{j,max}$		max.	8000 mA													

3. Changes in the datasheets: Forward Voltage

Product type	LE B P0MQ											
<u>Current Status</u>	<p>Forward Voltage Vf max.: 3.65 V</p> <hr/> <p>Characteristics $T_{\text{Board}} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$</td> <td rowspan="3">V_F</td> <td>min.</td> <td>3.20 V</td> </tr> <tr> <td>typ.</td> <td>3.50 V</td> </tr> <tr> <td>max.</td> <td>3.65 V</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	3.20 V	typ.	3.50 V	max.	3.65 V
Parameter	Symbol	Values										
Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	3.20 V									
		typ.	3.50 V									
		max.	3.65 V									
<u>New Status</u>	<p>Forward Voltage Vf max.: 3.8 V</p> <hr/> <p>Characteristics $T_{\text{Board}} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$</td> <td rowspan="3">V_F</td> <td>min.</td> <td>3.20 V</td> </tr> <tr> <td>typ.</td> <td>3.50 V</td> </tr> <tr> <td>max.</td> <td>3.80 V</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	3.20 V	typ.	3.50 V	max.	3.80 V
Parameter	Symbol	Values										
Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	3.20 V									
		typ.	3.50 V									
		max.	3.80 V									

3. Changes in the datasheets: Forward Voltage

Product type	LE B P1MQ										
Current Status	Forward Voltage Vf max.: 7.3V										
	<p>Characteristics</p> <p>$T_{\text{Board}} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$</td> <td rowspan="3">V_F</td> <td>min.</td> <td>6.4 V</td> </tr> <tr> <td>typ.</td> <td>7.0 V</td> </tr> <tr> <td>max.</td> <td>7.3 V</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	6.4 V	typ.	7.0 V	max.
Parameter	Symbol	Values									
Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	6.4 V								
		typ.	7.0 V								
		max.	7.3 V								
New Status	Forward Voltage Vf max.: 7.6V										
	<p>Characteristics</p> <p>$T_{\text{Board}} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Forward Voltage ²⁾ $I_F = 6000\text{ mA}$</td> <td rowspan="3">V_F</td> <td>min.</td> <td>6.4 V</td> </tr> <tr> <td>typ.</td> <td>7.0 V</td> </tr> <tr> <td>max.</td> <td>7.6 V</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ²⁾ $I_F = 6000\text{ mA}$	V_F	min.	6.4 V	typ.	7.0 V	max.
Parameter	Symbol	Values									
Forward Voltage ²⁾ $I_F = 6000\text{ mA}$	V_F	min.	6.4 V								
		typ.	7.0 V								
		max.	7.6 V								

3. Changes in the datasheets: Forward Voltage

Product type	LE B P2MQ									
<u>Current Status</u>	<p>Forward Voltage Vf max.: 14.6V</p> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Forward Voltage ⁵⁾</td> <td rowspan="3">V_F</td> <td>min.</td> </tr> <tr> <td rowspan="2">$I_F = 6000\text{ mA}$</td> <td>typ.</td> </tr> <tr> <td>max.</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾	V_F	min.	$I_F = 6000\text{ mA}$	typ.	max.
Parameter	Symbol	Values								
Forward Voltage ⁵⁾	V_F	min.								
$I_F = 6000\text{ mA}$		typ.								
		max.								
<u>New Status</u>	<p>Forward Voltage Vf max.: 15.2V</p> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Forward Voltage ⁵⁾</td> <td rowspan="3">V_F</td> <td>min.</td> </tr> <tr> <td rowspan="2">$I_F = 6000\text{ mA}$</td> <td>typ.</td> </tr> <tr> <td>max.</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾	V_F	min.	$I_F = 6000\text{ mA}$	typ.	max.
Parameter	Symbol	Values								
Forward Voltage ⁵⁾	V_F	min.								
$I_F = 6000\text{ mA}$		typ.								
		max.								

3. Changes in the datasheets: Forward Voltage

Product type	LE B P3MQ											
<u>Current Status</u>	<p>Forward Voltage Vf max.: 21.9V</p> <p>Characteristics</p> <p>$T_{\text{Board}} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$</td> <td rowspan="3">V_F</td> <td>min.</td> <td>19.2 V</td> </tr> <tr> <td>typ.</td> <td>21.0 V</td> </tr> <tr> <td>max.</td> <td>21.9 V</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	19.2 V	typ.	21.0 V	max.	21.9 V
	Parameter	Symbol	Values									
Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	19.2 V									
		typ.	21.0 V									
		max.	21.9 V									
<u>New Status</u>	<p>Forward Voltage Vf max.: 22.8V</p> <p>Characteristics</p> <p>$T_{\text{Board}} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$</td> <td rowspan="3">V_F</td> <td>min.</td> <td>19.2 V</td> </tr> <tr> <td>typ.</td> <td>21.0 V</td> </tr> <tr> <td>max.</td> <td>22.8 V</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	19.2 V	typ.	21.0 V	max.	22.8 V
Parameter	Symbol	Values										
Forward Voltage ⁵⁾ $I_F = 6000\text{ mA}$	V_F	min.	19.2 V									
		typ.	21.0 V									
		max.	22.8 V									

3. Changes in the datasheets: Peak Wavelength

Product type	LE D P0MQ; LE D P1MQ; LE D P2MQ; LE D P3MQ						
<u>Current Status</u>	<p>Peak Wavelength λ_{peak} typ.: 430nm</p> <hr/> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Peak Wavelength</td> <td>λ_{peak}</td> <td>typ. 430 nm</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Peak Wavelength	λ_{peak}	typ. 430 nm
Parameter	Symbol	Values					
Peak Wavelength	λ_{peak}	typ. 430 nm					
<u>New Status</u>	<p>Peak Wavelength λ_{peak} typ.: 432nm</p> <hr/> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Peak Wavelength</td> <td>λ_{peak}</td> <td>typ. 432 nm</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Peak Wavelength	λ_{peak}	typ. 432 nm
Parameter	Symbol	Values					
Peak Wavelength	λ_{peak}	typ. 432 nm					

3. Changes in the datasheets: Dominant Wavelength

Product type	LE D P1MQ; LE D P2MQ																				
<p><u>Current Status</u></p>	<p>Dominant Wavelength λ_{dom} min.: 432nm - max.: 444nm</p> <table border="1" data-bbox="698 692 1756 960"> <thead> <tr> <th colspan="4">Characteristics</th> </tr> <tr> <td colspan="4">$T_{\text{Board}} = 25\text{ °C}; I_{\text{F}} = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</td> </tr> <tr> <th>Parameter</th> <th>Symbol</th> <th colspan="2">Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Dominant Wavelength ³⁾</td> <td rowspan="3">λ_{dom}</td> <td>min.</td> <td>432 nm</td> </tr> <tr> <td>typ.</td> <td>440 nm</td> </tr> <tr> <td>max.</td> <td>444 nm</td> </tr> </tbody> </table>	Characteristics				$T_{\text{Board}} = 25\text{ °C}; I_{\text{F}} = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$				Parameter	Symbol	Values		Dominant Wavelength ³⁾	λ_{dom}	min.	432 nm	typ.	440 nm	max.	444 nm
Characteristics																					
$T_{\text{Board}} = 25\text{ °C}; I_{\text{F}} = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$																					
Parameter	Symbol	Values																			
Dominant Wavelength ³⁾	λ_{dom}	min.	432 nm																		
		typ.	440 nm																		
		max.	444 nm																		
<p><u>New Status</u></p>	<p>Dominant Wavelength λ_{dom} min.: 435nm - max.: 445nm</p> <table border="1" data-bbox="698 1094 1756 1334"> <thead> <tr> <th colspan="4">Characteristics</th> </tr> <tr> <td colspan="4">$T_{\text{Board}} = 25\text{ °C}; I_{\text{F}} = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</td> </tr> <tr> <th>Parameter</th> <th>Symbol</th> <th colspan="2">Values</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Dominant Wavelength ³⁾</td> <td rowspan="3">λ_{dom}</td> <td>min.</td> <td>435 nm</td> </tr> <tr> <td>typ.</td> <td>440 nm</td> </tr> <tr> <td>max.</td> <td>445 nm</td> </tr> </tbody> </table>	Characteristics				$T_{\text{Board}} = 25\text{ °C}; I_{\text{F}} = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$				Parameter	Symbol	Values		Dominant Wavelength ³⁾	λ_{dom}	min.	435 nm	typ.	440 nm	max.	445 nm
Characteristics																					
$T_{\text{Board}} = 25\text{ °C}; I_{\text{F}} = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$																					
Parameter	Symbol	Values																			
Dominant Wavelength ³⁾	λ_{dom}	min.	435 nm																		
		typ.	440 nm																		
		max.	445 nm																		

3. Changes in the datasheets: Partial Flux

Product type	LE A P0MQ; LE B P0MQ; LE D P0MQ; LE CG P0AQ;						
<u>Current Status</u>	<p>Partial Flux: $\Phi_{E/V, 120^\circ}$ typ. 0.78</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Characteristics</p> <p>$T_{Board} = 25^\circ\text{C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Partial Flux acc. CIE 127:2007⁴⁾ $I_F = 6000\text{ mA}$</td> <td>$\Phi_{E/V, 120^\circ}$</td> <td>typ. 0.78</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Partial Flux acc. CIE 127:2007 ⁴⁾ $I_F = 6000\text{ mA}$	$\Phi_{E/V, 120^\circ}$	typ. 0.78
Parameter	Symbol	Values					
Partial Flux acc. CIE 127:2007 ⁴⁾ $I_F = 6000\text{ mA}$	$\Phi_{E/V, 120^\circ}$	typ. 0.78					
<u>New Status</u>	<p>Partial Flux: $\Phi_{E/V, 120^\circ}$ typ. 0.77</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Characteristics</p> <p>$T_{Board} = 25^\circ\text{C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Partial Flux acc. CIE 127:2007⁴⁾ $I_F = 6000\text{ mA}$</td> <td>$\Phi_{E/V, 120^\circ}$</td> <td>typ. 0.77</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Partial Flux acc. CIE 127:2007 ⁴⁾ $I_F = 6000\text{ mA}$	$\Phi_{E/V, 120^\circ}$	typ. 0.77
Parameter	Symbol	Values					
Partial Flux acc. CIE 127:2007 ⁴⁾ $I_F = 6000\text{ mA}$	$\Phi_{E/V, 120^\circ}$	typ. 0.77					

3. Changes in the datasheets: Electrical thermal resistance junction/solderpoint

Product type	LE A P0MQ										
<u>Current Status</u>	<p>$R_{thJS\ elec.}$ typical : 1.1 K/W with efficiency $\eta_e = 28\%$</p> <p>Characteristics $T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th></th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 28\%$</td> <td>$R_{thJS\ elec.}$</td> <td>typ.</td> <td>1.1 K / W</td> </tr> </tbody> </table>			Parameter	Symbol		Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 28\%$	$R_{thJS\ elec.}$	typ.	1.1 K / W
Parameter	Symbol		Values								
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 28\%$	$R_{thJS\ elec.}$	typ.	1.1 K / W								
<u>New Status</u>	<p>$R_{thJS\ elec.}$ typical : 1.2 K / W with efficiency $\eta_e = 22\%$</p> <p>Characteristics $T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th></th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 22\%$</td> <td>$R_{thJS\ elec.}$</td> <td>typ.</td> <td>1.2 K / W</td> </tr> </tbody> </table>			Parameter	Symbol		Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 22\%$	$R_{thJS\ elec.}$	typ.	1.2 K / W
Parameter	Symbol		Values								
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 22\%$	$R_{thJS\ elec.}$	typ.	1.2 K / W								

3. Changes in the datasheets: Electrical thermal resistance junction/solderpoint

Product type	LE B P0MQ						
<u>Current Status</u>	<p>$R_{thJS\ elec.}$ typical : 1.0 K/W with efficiency $\eta_e = 34\%$</p> <p>Characteristics $T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 34\%$</td> <td>$R_{thJS\ elec.}$</td> <td>typ. 1.0 K / W</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 34\%$	$R_{thJS\ elec.}$	typ. 1.0 K / W
Parameter	Symbol	Values					
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 34\%$	$R_{thJS\ elec.}$	typ. 1.0 K / W					
<u>New Status</u>	<p>$R_{thJS\ elec.}$ typical : 1.1 K / W with efficiency $\eta_e = 31\%$</p> <p>Characteristics $T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.25$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 31\%$</td> <td>$R_{thJS\ elec.}$</td> <td>typ. 1.1 K / W</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 31\%$	$R_{thJS\ elec.}$	typ. 1.1 K / W
Parameter	Symbol	Values					
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 31\%$	$R_{thJS\ elec.}$	typ. 1.1 K / W					

3. Changes in the datasheets:
Electrical thermal resistance junction/solderpoint

Product type	LE D P0MQ						
<u>Current Status</u>	<p>$R_{thJS\ elec}$ typical : 1.0 K/W with efficiency $\eta_e = 34\%$</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Parameter</th> <th style="text-align: left;">Symbol</th> <th style="text-align: left;">Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 34\%$</td> <td>$R_{thJS\ elec}$</td> <td>typ. 1.0 K / W</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 34\%$	$R_{thJS\ elec}$	typ. 1.0 K / W
Parameter	Symbol	Values					
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 34\%$	$R_{thJS\ elec}$	typ. 1.0 K / W					
<u>New Status</u>	<p>$R_{thJS\ elec}$ typical : 0.9 K / W with efficiency $\eta_e = 40\%$</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Parameter</th> <th style="text-align: left;">Symbol</th> <th style="text-align: left;">Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 40\%$</td> <td>$R_{thJS\ elec}$</td> <td>typ. 0.9 K / W</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 40\%$	$R_{thJS\ elec}$	typ. 0.9 K / W
Parameter	Symbol	Values					
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 40\%$	$R_{thJS\ elec}$	typ. 0.9 K / W					

3. Changes in the datasheets:
Electrical thermal resistance junction/solderpoint

Product type	LE CG P0AQ						
<u>Current Status</u>	<p>$R_{thJS\ elec.}$ typical : 1.1 K/W with efficiency $\eta_e = 30\%$</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Parameter</th> <th style="text-align: left;">Symbol</th> <th style="text-align: left;">Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 30\%$</td> <td>$R_{thJS\ elec.}$ typ.</td> <td>1.1 K / W</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 30\%$	$R_{thJS\ elec.}$ typ.	1.1 K / W
Parameter	Symbol	Values					
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 30\%$	$R_{thJS\ elec.}$ typ.	1.1 K / W					
<u>New Status</u>	<p>$R_{thJS\ elec.}$ typical : 1.2 K / W with efficiency $\eta_e = 26\%$</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Parameter</th> <th style="text-align: left;">Symbol</th> <th style="text-align: left;">Values</th> </tr> </thead> <tbody> <tr> <td>Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 26\%$</td> <td>$R_{thJS\ elec.}$ typ.</td> <td>1.2 K / W</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 26\%$	$R_{thJS\ elec.}$ typ.	1.2 K / W
Parameter	Symbol	Values					
Electrical thermal resistance junction/solderpoint with efficiency $\eta_e = 26\%$	$R_{thJS\ elec.}$ typ.	1.2 K / W					

3. Changes in the datasheets: Radiating surface

Product type	LE A P1MQ; LE B P1MQ; LE D P1MQ, LE CG P1AQ						
<u>Current Status</u>	<p>Radiating surface: A_{color} typ. 2.6 x 1.5 mm²</p> <p>Characteristics $T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Radiating surface</td> <td>A_{color}</td> <td>typ. 2.6 x 1.5 mm²</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Radiating surface	A_{color}	typ. 2.6 x 1.5 mm ²
Parameter	Symbol	Values					
Radiating surface	A_{color}	typ. 2.6 x 1.5 mm ²					
<u>New Status</u>	<p>Radiating surface: A_{color} typ. 2.6 x 1.55 mm²</p> <p>Characteristics $T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Radiating surface</td> <td>A_{color}</td> <td>typ. 2.6 x 1.55 mm²</td> </tr> </tbody> </table>	Parameter	Symbol	Values	Radiating surface	A_{color}	typ. 2.6 x 1.55 mm ²
Parameter	Symbol	Values					
Radiating surface	A_{color}	typ. 2.6 x 1.55 mm ²					

Dimension drawing updated accordingly and available after info note

3. Changes in the datasheets: Radiating surface

Product type	LE A P3MQ; LE B P3MQ; LE D P3MQ, LE CG P3AQ						
<u>Current Status</u>	<p>Radiating surface: A_{color} typ. 4.8 x 2.6 mm²</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Radiating surface</td> <td>A_{color}</td> <td>typ. 4.8 x 2.6 mm²</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Radiating surface	A_{color}	typ. 4.8 x 2.6 mm ²
Parameter	Symbol	Values					
Radiating surface	A_{color}	typ. 4.8 x 2.6 mm ²					
<u>New Status</u>	<p>Radiating surface: A_{color} typ. 4.85 x 2.6 mm²</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> <p>Characteristics</p> <p>$T_{Board} = 25\text{ °C}; I_F = 6000\text{ mA}; f = 1000\text{ Hz}; D = 0.50$</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Symbol</th> <th>Values</th> </tr> </thead> <tbody> <tr> <td>Radiating surface</td> <td>A_{color}</td> <td>typ. 4.85 x 2.6 mm²</td> </tr> </tbody> </table> </div>	Parameter	Symbol	Values	Radiating surface	A_{color}	typ. 4.85 x 2.6 mm ²
Parameter	Symbol	Values					
Radiating surface	A_{color}	typ. 4.85 x 2.6 mm ²					

Dimension drawing updated accordingly and available after info note

OS-IN-2021-008

**Harmonization of datasheets for OSRAM OSTAR®
Projection Power**



4. Time schedule

- New datasheet available 28.03.2021
- New forward voltage, V_F start of delivery 28.03.2021

QUALITY
FIRST

Thank you.

Light is OSRAM

15.03.2021

OS-IN-2021-008

Harmonization of datasheets for OSRAM OSTAR® Projection Power

Objective	Correction of datasheet for OSRAM OSTAR® Projection Power
Products affected	LE A P0MQ; LE A P1MQ; LE A P2MQ; LE A P3MQ LE B P0MQ; LE B P1MQ; LE A P2MQ; LE A P3MQ LE D P0MQ; LE D P1MQ; LE D P2MQ; LE D P3MQ LE CG P0AQ; LE CG P1AQ; LE CG P2AQ; LE CG P3AQ
Application	<ul style="list-style-type: none">• Home - Projection Home LED & Laser• Office - Projection Professional LED & Laser
Background	<ul style="list-style-type: none">• To standardize and harmonize of datasheet for same OSRAM OSTAR Projection Power product family
Realization	<ul style="list-style-type: none">• To remove operating temperature from datasheet• Increase maximum forward current from 6A to 8A for Red• Correction of forward voltage, V_f for Blue• Harmonization of electrical thermal resistance and efficiency values• To harmonize radiating surface, peak wavelength and partial flux values
Time Schedule	New data sheet is available: 28.03.2021 New forward voltage, V_f start of delivery: 28.03.2021
Assessment	No change in fit and form of the product

Please direct your inquiry to your local Sales office.

OSRAM Opto Semiconductors
GmbH

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93055 Regensburg, Germany
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Fax +49 941 850-1002
www.osram-os.com

Q-Number	Q-Description	Device Family	Brand
Q65113A0544	LE A P0MQ-QSRQ-2-0-F00-R18	LE A P0MQ	OSRAM OSTAR
Q65113A2879	LE A P1MQ-SPSR-2-0-F00-XX	LE A P1MQ	OSRAM OSTAR
Q65113A0488	LE A P1MQ-SPSS-2-0-F00-PA	LE A P1MQ	OSRAM OSTAR
Q65112A7754	LE A P1MQ-SPST-2-0-F00	LE A P1MQ	OSRAM OSTAR
Q65113A0595	LE A P1MQ-SQST-2-0-F00-XX	LE A P1MQ	OSRAM OSTAR
Q65112A7847	LE A P2MQ-TSUQ-2-0-F00	LE A P2MQ	OSRAM OSTAR
Q65113A0613	LE A P2MQ-TUUP-2-0-F00-XX	LE A P2MQ	OSRAM OSTAR
Q65112A7845	LE A P3MQ-URVP-2-0-F00	LE A P3MQ	OSRAM OSTAR
Q65113A0491	LE A P3MQ-USUU-2-0-F00-XX	LE A P3MQ	OSRAM OSTAR
Q65113A0547	LE B P0MQ-DSEQ-23-0-F00-R18	LE B P0MQ	OSRAM OSTAR
Q65113A2880	LE B P1MQ-FPFR-23-0-F00-XX	LE B P1MQ	OSRAM OSTAR
Q65113A2206	LE B P1MQ-FPFS-2-0-F00-XX	LE B P1MQ	OSRAM OSTAR
Q65112A7815	LE B P1MQ-FPFT-23-0-F00	LE B P1MQ	OSRAM OSTAR
Q65112A9484	LE B P1MQ-FQFT-23-0-F00	LE B P1MQ	OSRAM OSTAR
Q65113A0486	LE B P1MQ-FQFT-23-0-F00-PA	LE B P1MQ	OSRAM OSTAR
Q65113A0546	LE CG P0AQ-SQSU-A-0-F00-R18	LE CG P0AQ	OSRAM OSTAR
Q65112A9483	LE CG P1AQ-TUUQ-A-0-F00	LE CG P1AQ	OSRAM OSTAR
Q65112A7846	LE CG P1AQ-TUUS-A-0-F00	LE CG P1AQ	OSRAM OSTAR
Q65113A0487	LE CG P1AQ-UPUR-A-0-F00-PA	LE CG P1AQ	OSRAM OSTAR
Q65113A2327	LE CG P1AQ-UPUR-A-0-F00-XX	LE CG P1AQ	OSRAM OSTAR
Q65113A0600	LE CG P1AQ-UQUR-A-0-F00-XX	LE CG P1AQ	OSRAM OSTAR
Q65112A7818	LE CG P2AQ-VRWP-A-0-F00	LE CG P2AQ	OSRAM OSTAR
Q65113A0597	LE CG P2AQ-VSVT-A-0-F00-XX	LE CG P2AQ	OSRAM OSTAR
Q65113A0493	LE CG P3AQ-WQWS-A-0-F00-XX	LE CG P3AQ	OSRAM OSTAR
Q65112A7819	LE CG P3AQ-WQWU-A-0-F00	LE CG P3AQ	OSRAM OSTAR
Q65113A0545	LE D P0MQ-EPET-R-0-F00-R18	LE D P0MQ	OSRAM OSTAR
Q65112A9475	LE D P1MQ-FSGP-R-0-F00	LE D P1MQ	OSRAM OSTAR
Q65112A8053	LE D P1MQ-FSGQ-R-0-F00	LE D P1MQ	OSRAM OSTAR
Q65113A0594	LE D P1MQ-FTGP-R-0-F00-XX	LE D P1MQ	OSRAM OSTAR
Q65112A8034	LE D P2MQ-HPHT-R-0-F00	LE D P2MQ	OSRAM OSTAR
Q65113A0598	LE D P2MQ-HRHS-R-0-F00-XX	LE D P2MQ	OSRAM OSTAR
Q65112A8033	LE D P3MQ-HTJR-R-0-F00	LE D P3MQ	OSRAM OSTAR
Q65112A8033	LE D P3MQ-HTJR-R-0-F00	LE D P2MQ	OSRAM OSTAR