

Issue Date: 8/14/2024

Parts Affected	SMTL2-GC	Old Rev.	A	New Rev.	В
	SMTL2-SBWC		A		В
	SMTL2-SGC		A		В
	SMTL2-SPGC		A		В
	SMTL2-SYC		A		В
	SMTL2-UWD		A		В

Change Will Affect:

LED optical, electrical and mechanical characteristics.

Description of Change:

Changes are reflected as shown in the tables below.

	Feature	SMTL2-GC Rev. A	SMTL2-GC Rev. B
1	LED Thickness (mm)	2mm	1.8mm
2	LED Pad Width (mm)	2.4mm	2.2mm
3	Storage Temp (C)	-40C to +100C	-40C to +85C
4	Power Dissipation (mW)	72mW	78mW
5	Forward Volatge (Vf) Min/Typ/ Max	N/A, 1.9V, 2.4V	1.8V, 2.0V, 2.3V
6	Reverse Current (uA)	100uA	10uA
7	Dominant Wavelength (nm) Min/ Typ/Max	564, 570, 574	568, 572, 576
8	Luminous Intensity (mcd) Min/ Typ/Max	20, 40, N/A	18, 22.5, 36
9	ESD (V)	2000V	N/A
10	Iv to If Graph Start Point	2.5%, 1mA	1%, 1mA

These changes have been reviewed and approved by Bivar management per Bivar Procedure: Engineering Change Order and Part Change Notification, SOP-040, SOP-ENG-045



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	Feature	SMTL2-SBWC Rev. A	SMTL2-SBWC Rev. B
1	Material	InGaN	GaN
2	Pad Width (mm)	2.4mm	2.2mm
3	LED Thickness (mm)	2.0mm	1.8mm
4	Max Continuous Forward Current (mA)	30mA	25mA
5	Storage Temp (C)	-40C to +100C	-40C to +85C
6	ESD (V)	2000V	N/A
7	Forward Voltage (Vf) Min/Typ/ Max	N/A, 3.2V, 3.5V	2.8V, 3.1V, 3.5V
8	Dominant Wavelength (nm) Min/ Typ/Max	463, 470, 471	463, 468, 474
9	Luminous Intensity (mcd) Min/ Typ/Max	115, 285, N/A	225, 360, 550
10	Iv to If Graph Start Point	2.5%, 1mA	1%, 1mA

	Feature	SMTL2-SGC Rev. A	SMTL2-SGC Rev. B
1	Pad Width (mm)	2.4mm	2.2mm
2	LED Thickness (mm)	2.0mm	1.8mm
3	Max Power Dissipation (mW)	72mW	78mW
4	Storage Temp (C)	-40C to +100C	-40C to +85C
5	ESD (V)	2000V	N/A
6	Forward Voltage (Vf) Min/Typ/ Max	N/A, 1.9V, 2.4V	1.9V, 2.1V, 2.3V
7	Reverse Current (uA)	100uA	10uA
8	Dominant Wavelength (nm) Min/ Typ/Max	568, 574, 578	568, 572, 576
9	Luminous Intensity (mcd) Min/ Typ/Max	57, 115, N/A	72, 90, 145
10	Iv to If Graph Start Point	2.5%, 1 mA	1%, 1mA

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	Feature	SMTL2-SPGC Rev. A	SMTL2-SPGC Rev. B
1	Material	InGaN	GaN
2	Pad Width (mm)	2.4mm	2.2mm
3	LED Thickness (mm)	2.0mm	1.8mm
4	Max Continuous Forward Current (mA)	30mA	25mA
5	Storage Temp (C)	-40C to +100C	-40C to +85C
6	ESD (V)	2000V	N/A
7	Forward Voltage (Vf) Min/Typ/ Max	N/A, 3.3V, 4.2V	2.7V, 3.0V, 3.3V
8	Dominant Wavelength (nm) Min/ Typ/Max	516, 525, 536	516, 521, 527
9	Luminous Intensity (mcd) Min/ Typ/Max	360, 570, N/A	1450, 1650, 1850
10	Iv to If Graph Start Point	2.5%, 1mA	1%, 1mA

	Feature	SMTL2-SYC Rev. A	SMTL2-SYC Rev. B
1	Pad Width (mm)	2.4mm	2.2mm
2	LED Thickness (mm)	2.0mm	1.8mm
3	Max Power Dissipation (mW)	72mW	78mW
4	Storage Temp (C)	-40C to +100C	-40C to +85C
5	ESD (V)	2000V	N/A
6	Forward Voltage (Vf) Min/Typ/ Max	N/A, 1.9V, 2.4V	1.8V, 2.0V, 2.3V
7	Reverse Current (uA)	100uA	10uA
8	Dominant Wavelength (nm) Min/ Typ/Max	585, 591, 594	586, 590, 594
9	Luminous Intensity (mcd) Min/ Typ/Max	115, 180, N/A	145, 180, 285
10	Iv to If Graph Start Point	2.5%, 1mA	1%, 1mA

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	Feature	SMTL2-UWD Rev. A	SMTL2-UWD Rev. B
1	Material	InGaN	GaN
2	Lens Color	Diffused	Yellow Diffused
3	LED Pad Width (mm)	2.4mm	2.2mm
4	LED Thickness (mm)	2.0mm	1.8mm
5	Storage Temp (C)	-40C to +100C	-40C to +85C
6	ESD (V)	2000V	N/A
7	Forward Voltage (Vf) Min/Typ/ Max	N/A, 3.2V, 4.0V	2.8V, 3.1V, 3.5V
8	Chromaticity Coordinates (X, Y) Typ	X=0.30, Y=0.30	X=0.29, Y=0.29
9	Luminous Intensity (mcd) Min/ Typ/Max	1150, 1800, N/A	1150, 1450, 2250

Effective Date of Change: August 14, 2024

Reason for Change: New chips are being used due to chip obsolescence.

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