



Product Change Notification



Product Group: OPT/Wed Sep 21, 2022/PCN-OPT-1239-2022-REV-0

Chip change for 5mm green LEDs from GaP to AllnGaP.

DESCRIPTION OF CHANGE: The phasing out GaP technology chip will be replaced by the state-of-the-art AllnGaP chip technology.

REASON FOR CHANGE: Discontinuation of GaP process

EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE: Improved degradation behavior, higher brightness allows lower driving current.

PART NUMBERS/SERIES/FAMILIES AFFECTED: Please see materials list on the succeeding page.

VISHAY BRAND(s): Vishay Semiconductors

TIME SCHEDULE:

Start Shipment Date: Wed Feb 1, 2023

SAMPLE AVAILABILITY: Oct 17, 2022

PRODUCT IDENTIFICATION: New device names: TLHG5420*, TLHG6420*, TLLG5420*

QUALIFICATION DATA: Available on request.

This PCN is considered approved, without further notification, unless we receive specific customer concerns before Tue Nov 1, 2022 or as specified by contract.

ISSUED BY: Harald Lunt, led@vishay.com

For further information, please contact your regional Vishay office.

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Product Change Notification



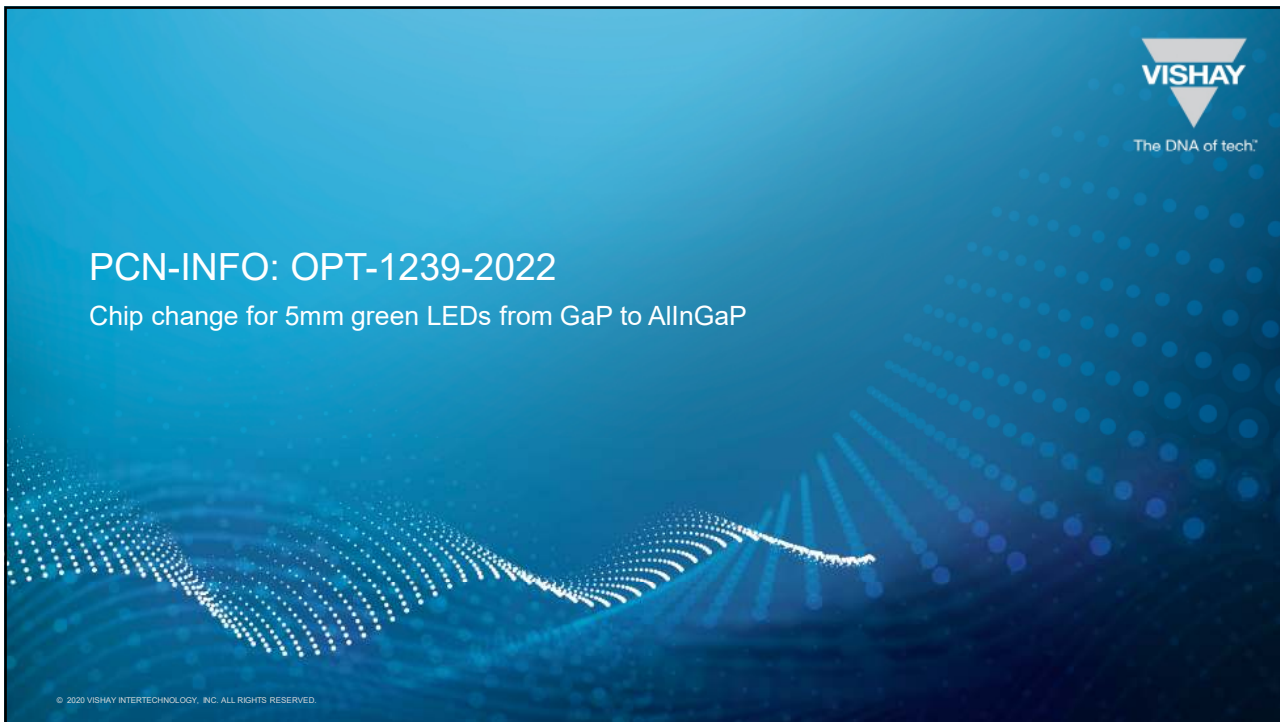
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TLHG5400	TLHG5400-AS12Z	TLHG5401	TLHG5405	TLHG5405-KSZ
TLHG6400	TLHG6400-AS12Z	TLHG6400-CS12Z	TLHG6401	TLHG6405
TLHG6405-ASZ	TLLG5400	TLLG5401		

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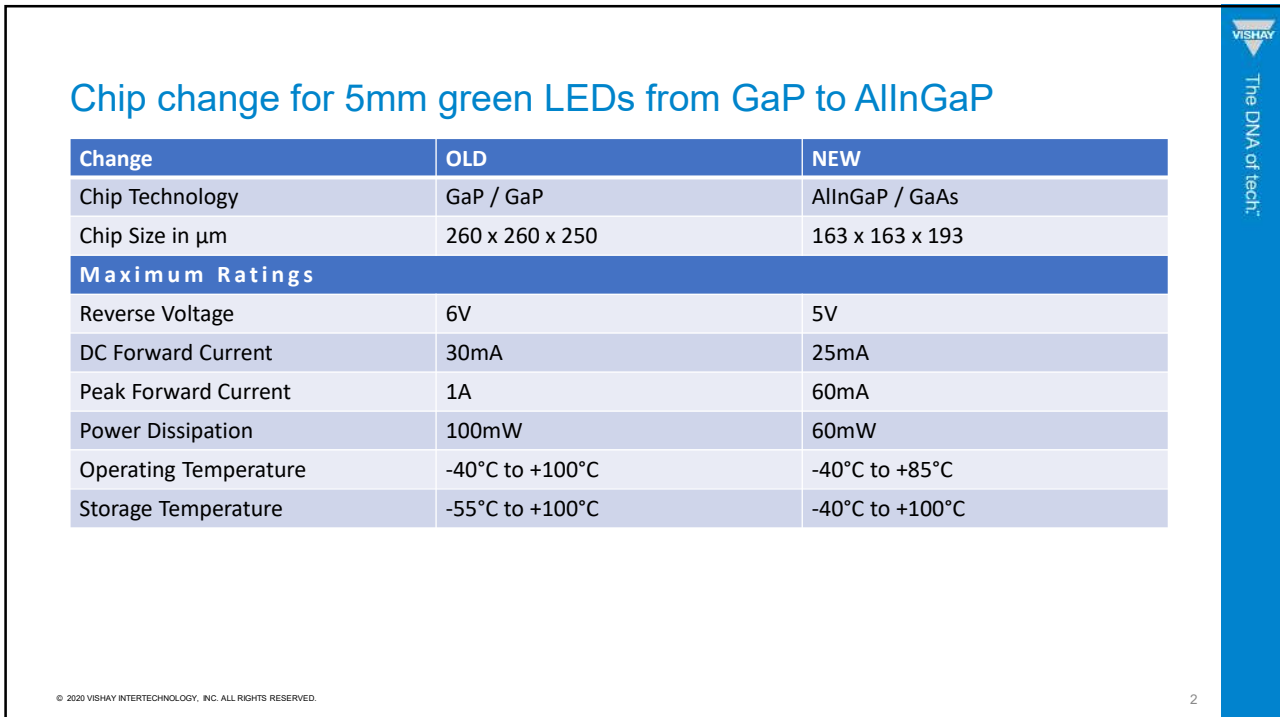
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Chip change for 5mm green LEDs from GaP to AllnGaP

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Chip change for 5mm green LEDs from GaP to AllnGaP

Change	OLD	NEW
Chip Technology	GaP / GaP	AllnGaP / GaAs
Chip Size in μm	260 x 260 x 250	163 x 163 x 193
Maximum Ratings		
Reverse Voltage	6V	5V
DC Forward Current	30mA	25mA
Peak Forward Current	1A	60mA
Power Dissipation	100mW	60mW
Operating Temperature	-40°C to +100°C	-40°C to +85°C
Storage Temperature	-55°C to +100°C	-40°C to +100°C

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Chip change for 5mm green LEDs from GaP to AlInGaP

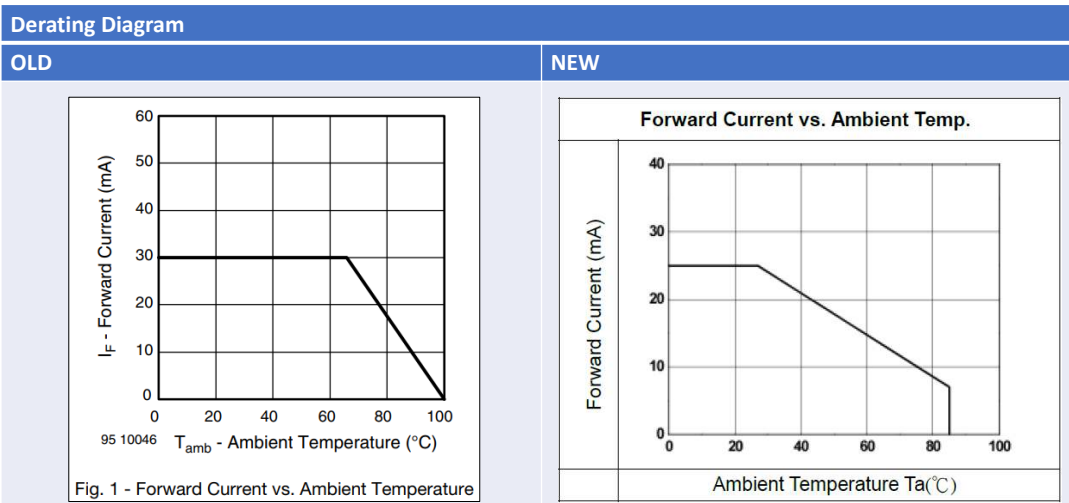
Optical and Electrical Characteristics (Tamb = 25°C, unless otherwise specified)										
Change	OLD					NEW				
	Type	Min.	Typ.	Max.	@I _F or V _R	Type	Min.	Typ.	Max.	@I _F or V _R
Luminous Intensity	TLHG5400	1.6 mcd	10 mcd	---	10 mA	TLHG5420 TLHG6420	6.3 mcd	20 mcd	---	10 mA
	TLHG6400									
	TLHG5401	4 mcd	12 mcd	---						
	TLHG6401									
	TLHG5405	6.3 mcd	15 mcd	---						
	TLHG6405									
TLLG5400	0.63 mcd	1.2 mcd	---	2 mA	TLLG5420	1 mcd	3.5 mcd	---	2 mA	
TLLG5401	1 mcd	2 mcd	---							
Forward Voltage	TLHG54..	---	2.4 V	3 V	20 mA	TLHG5420 TLHG6420	---	2 V	2.4 V	20 mA
	TLHG64..									
	TLLG54..	---	1.9 V	2.4 V						
Reverse Current	TLHG54..	---	---	10 μA	6 V	TLLG5420	---	---	10 μA	5 V
	TLHG64..									
	TLLG54..									

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Chip change for 5mm green LEDs from GaP to AlInGaP

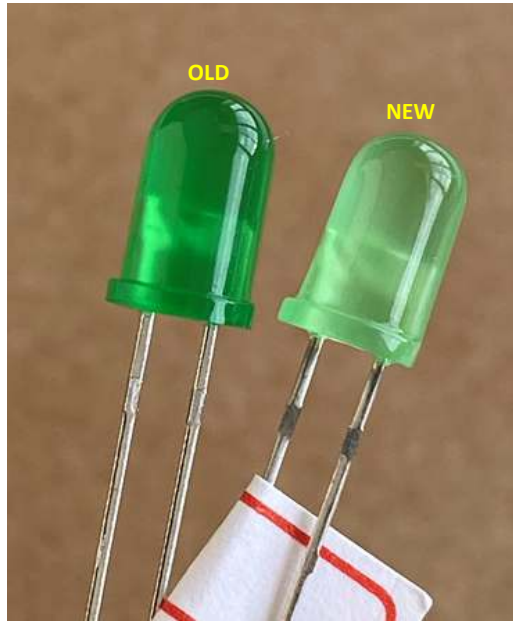


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Visual Appearance



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Change of Device Names

OLD	NEW
TLHG5400	TLHG5420
TLHG5401	
TLHG5405	
TLHG5400-AS12Z	
TLHG5405-KSZ	
TLHG6400	TLHG6420
TLHG6401	
TLHG6405	
TLHG6400-AS12Z	
TLHG6405-ASZ	
TLHG6400-CS12Z	TLHG6420-CSZ
TLLG5400	TLLG5420
TLLG5401	

selection types (.01, .05) make no more sense, because the lower bins would have no yield

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