Product Change Notification

Product Group: Opto Sensors & IRDC **13-AUG-2018 / PCN OSI-1005-2017 Rev. 0**

TITLE: VSMY2850(G/RG) / VSMY2853(G/RG/SL): Change in Chip

DESCRIPTION OF CHANGE: A new chip generation will be introduced in VSMY285* dome lens products. It has an approximately 20% increased radiant intensity, while the forward voltage is slightly reduced. This allows for an overall reduction in power consumption.
A detailed comparison of the performance is shown in the attached file, named "PCN OSI-1005-2017 - change description.pdf".

CLASSIFICATION OF CHANGE: Direct Materials (Major)

REASON FOR CHANGE: Introduction of new chip generation with improved electro-optical performance.

EXPECTED INFLUENCE ON QUALITY RELIABILITY / PERFORMANCE: No influence on quality and reliability expected.
Performance increase with about 20% higher radiant intensity and slightly lower forward voltage.

PRODUCT CATEGORY: Infrared Emitters

PART NUMBERS / SERIES / FAMILIES AFFECTED:

VSMY2850G
VSMY2850G1
VSMY2850RG
VSMY2853G
VSMY2853RG
VSMY2853SL
VSMY2853SLS

VISHAY BRAND(s): VISHAY SEMICONDUCTORS

TIME SCHEDULE:

Start Shipment Date: 01-JAN-2019

SAMPLES AVAILABLE BEGINNING: 01-AUG-2018

We need samples for evaluation: ☐Yes ☐No
If Yes return this form to contact information below.

Annotations about time schedule:

PRODUCT IDENTIFICATION: Date Code

QUALIFICATION DATA: available on request

This PCN is considered approved, without further notification, unless we receive specific customer concerns before: 31-OCT-2018 or as specified by contract.

ISSUED BY:

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For further Information, please contact your regional Vishay office.

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Product Group: Opto Sensors & IRDC **13-AUG-2018 / PCN OSI-1005-2017 Rev. 0**

Attached Part Number List:

Material List
PCN OSI-1005-2017

VSMY2850G
VSMY2850G1
VSMY2850RG
VSMY2850RG1
VSMY2853G
VSMY2853RG
VSMY2853SL
VSMY2853SLS

VSMY285* : CHANGE IN CHIP

PCN OSI-1005-2017

A WORLD OF SOLUTIONS

DATASHEET CHANGES
VSMY2850RG / VSMY2850G

After PCN

Basic Characteristics						
Parameter	**Test condition**	**Symbol**	**Min.**	**Typ.**	**Max.**	**Unit**
Forward Voltage	I_F = 100 mA, t_P = 20 ms	V_F		1.6	1.9	V
	I_F = 1 A, t_P = 100 µs	V_F		2.8		V
Temperature Coefficient of V_F	I_F = 100 mA	TK_{VF}		-1.5		mV/K
Junction Capacitance	V_R = 0 V, f = 1 MHz, E = 0			50		pF
Radiant Intensity	I_F = 100 mA, t_P = 20 ms	I_e	70	125	210	mW/sr
	I_F = 1 A, t_P = 100 µs	I_e		1000		mW/sr
Temperature Coefficient of radiant power	I_F = 100 mA	$TK_{\phi e}$		-0.12		%/K

Before PCN

Symbol	**Min.**	**Typ.**	**Max.**	**Unit**
V_F		1.65	1.9	V
V_F		2.9		V
		-1.6		mV/K
		125		pF
I_e	50	100	150	mW/sr
I_e		850		mW/sr
$TK_{\phi e}$		-0.2		%/K

DATASHEET CHANGES
VSMY2853RG / VSMY2853G / VSMY2853SL

After PCN

Basic Characteristics						
Parameter	**Test condition**	**Symbol**	**Min.**	**Typ.**	**Max.**	**Unit**
Forward Voltage	I_F = 100 mA, t_p = 20 ms	V_F		1.6	1.9	V
	I_F = 1 A, t_p = 100 µs	V_F		2.8		V
Temperature Coefficient of V_F	I_F = 1 mA	TK_{VF}		-		mV/K
	I_F = 10 mA	TK_{VF}		-		mV/K
	I_F = 100 mA	TK_{VF}		-1.5		mV/K
Junction Capacitance	V_R = 0 V, f = 1 MHz, E = 0			50		pF
Radiant Intensity	I_F = 100 mA, t_p = 20 ms	I_e	27	50	75	mW/sr
	I_F = 1 A, t_p = 100 µs	I_e		350		mW/sr
Temperature Coefficient of radiant power	I_F = 100 mA	$TK_{\phi e}$		-0.12		%/K

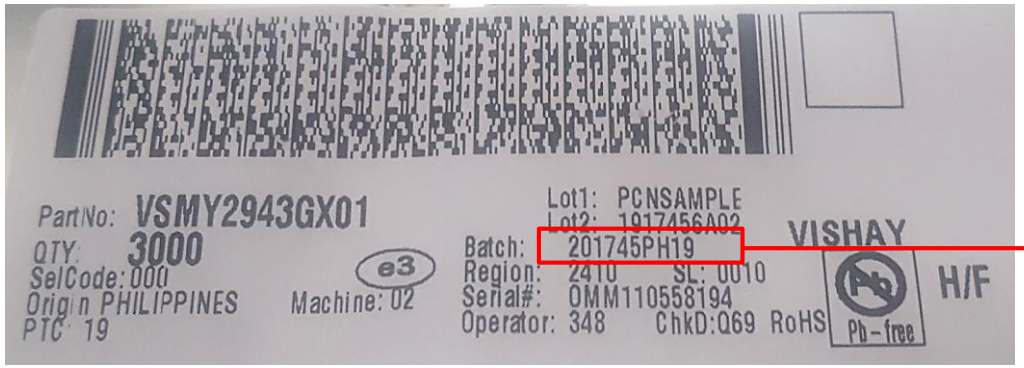
Before PCN

Symbol	**Min.**	**Typ.**	**Max.**	**Unit**
V_F		1.65	1.9	V
V_F		2.9		V
		-1.5		mV/K
		-1.3		mV/K
		-		mV/K
		125		pF
I_e	20	35	50	mW/sr
I_e		300		mW/sr
$TK_{\phi e}$		-0.35		%/K

TIMELINE & CONTACT

- Start shipment date: week 01 / 2019
- The change is indicated by the date code on the label.

- Sample label:



2017 = year
45 = week

- Contact:
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