



Product Change Notification



Product Group: Vishay Ceramic Capacitors / February 26, 2015 / PCN-CC-002-2015 Rev 0

RoHS Compliance without any exemptions for last missing individual P/Ns of leaded Vishay BCcomponents disc caps

DESCRIPTION OF CHANGE: Total elimination of Pb in the ceramic material of last missing individual P/Ns to fulfil compliance with RoHS without any exemptions (7c-II) with all P/Ns of leaded Vishay BCcomponents disc capacitor series.

CLASSIFICATION OF CHANGE: Lead Free Switchover

REASON FOR CHANGE: Some individual P/Ns still make use of exemption 7c-II to fulfil RoHS compliance. This exemption will possibly outdate mid of July 2016. Products will be future-proof by totally eliminating Pb in ceramic materials.

EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE: none

PRODUCT CATEGORY: Ceramic Capacitors

PART NUMBERS/SERIES/FAMILIES AFFECTED:

VY1 Series only part numbers beginning with: VY1680K31Y5S*, VY1101K31Y5S*, VY1151K31Y5S*
VY2 Series only part numbers beginning with: VY2151K29Y5S*, VY2221K29Y5S*
S Series only part numbers beginning with: S151M33Z5UR*, S221M33Z5UR*

VISHAY BRAND(s): Vishay BCcomponents

TIME SCHEDULE:

Start Shipment Date: June 29, 2015 (production week 27/2015)
Last Time Buy Date: N/A
Last Time Shipment Date: mixed shipments may occur until July 01, 2016 (week 26/2016)

SAMPLE AVAILABILITY: on request

PRODUCT IDENTIFICATION: by date code

QUALIFICATION DATA: see attached on page 2

This PCN is considered approved, without further notification, unless we receive specific customer concerns before March 31, 2015 or as specified by contract.

ISSUED BY: Product Marketing Ceramic Capacitors

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Qualification Report

Pb-Free Ceramic Capacitor Series VY1 and VY2

Test Report Summary – Part Numbers:

VY1680K31Y5S*, VY1101K31Y5S*, VY1151K31Y5S*

Test	Test Condition	Requirements	Result
Dimensions		Within Specification	PASS
C, tan δ	1V, 1kHz, 20-25°C	Within Specification	PASS
R _{is}	500V	>10x10 ⁹ Ω	PASS
BD-Voltage (AC)	Increase to BD	>5,0kV	PASS
Impulse	1,2/50-Wave / 3x	>8,0kV	PASS
Life Test (AC)	550V / +125°C / 1000h	$\Delta C/C_0 < 15\%$, Voltage Test	PASS
Humidity	+40°C / 93% r.H. / 21d	$\Delta C/C_0 < 15\%$, Voltage Test	PASS
Thermal Shock	-40°C / +125°C / 30min / 5x	$\Delta C/C_0 < 30\%$, Visual Insp.	PASS
RSH	260°C / 10s	$\Delta C/C_0 < 10\%$, Visual Insp.	PASS

Test Report Summary – Part Numbers:

VY2151K29Y5S*, VY2221K29Y5S*

Test	Test Condition	Requirements	Result
Dimensions		Within Specification	PASS
C, tan δ	1V, 1kHz, 20-25°C	Within Specification	PASS
R _{is}	500V	>10x10 ⁹ Ω	PASS
BD-Voltage (AC)	Increase to BD	>3,25kV	PASS
Impulse	1,2/50-Wave / 3x	>5,0kV	PASS
Life Test (AC)	1500V / +125°C / 1000h	$\Delta C/C_0 < 15\%$, Voltage Test	PASS
Humidity	+40°C / 93% r.H. / 21d	$\Delta C/C_0 < 15\%$, Voltage Test	PASS
Thermal Shock	-40°C / +125°C / 30min / 5x	$\Delta C/C_0 < 30\%$, Visual Insp.	PASS
RSH	260°C / 10s	$\Delta C/C_0 < 10\%$, Visual Insp.	PASS

Uwe Partenfelder
R&D and Engineering
February 24, 2015

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