



## Rubycon Corporation

1938-1 Nishi-Minowa, Ina-City, Nagano 399-4593 JAPAN  
Tel.: +81—265-72-7111, Fax: +81-265-73-2914, www.rubycon.co.jp

Dated: Mar 23, 2011

### PCN – PRODUCT CHANGE NOTICE

Material Change of sleeve material on Al-Electrolytic Capacitors

#### BACKGROUND:

The AE capacitor industry has been making a change to the standard sleeve material. The sleeve is primarily used to identify and mark the product. There are no electrical and functional characteristics. It was common in the industry to use a PVC material but to accommodate strict REACH requirements we have decided to standardize to PET material in the following running change.

#### 1. Items to be changed

Product type	Product size (Diameter)
Lead wire terminal type (CE04 type)	φ4 ~ φ18 mm
Snap-in terminal type (CE69* type)	φ20 ~ φ35 mm

※ Surface-mount Al-chip type (CE32 type) are exempted from this change.

※ Screw terminal type (CE331type) are exempted from this change.

#### 2. Details of change

(1) The material of the sleeve to be changed from PVC(Poly vinyl chloride) to PET(Polyethylene terephthalate).

(2) In order to distinguish PET from the current products(PVC), the product code to be changed as follow.

Product type	Current (with PVC sleeve)	New type (PET sleeve)
Lead wire type (CE04 type)	(ex.) 10ZLH3300M 12.5X20	(ex.) 10ZLH3300M <b>EFC</b> 12.5X20
Snap-in type (CE69* type)	(ex.) 450MXC220M OOE SN30X35 450MXC220M SN30X35	(ex.) 450MXC220M <b>EFC</b> SN30X35

Snap-in type with PET sleeve shall have no bottom plate as standard.

(3)The color of the sleeve for following series will be changed to black as described below and the rest remains unchanged.

<The series which will change the color of the sleeve>

MS 7 series (Dark Purple ⇒Black)

NW7 series (Grey ⇒Black)

NW5 series (Grey ⇒Black)

MHE series (Dark Purple⇒Black)

(4)Following series have been produced with PET sleeve since the start of its production..

(It is not necessary to put "EFC" on the product code for these series.)

ZLK series、 ZLJ series、 ZT series、 BXF series、 AX series、 YXJ series、 RX30 series
--



## Rubycon Corporation

1938-1 Nishi-Minowa, Ina-City, Nagano 399-4593 JAPAN

Tel.: +81—265-72-7111, Fax: +81-265-73-2914, www.rubycon.co.jp

(5) External appearance and its indication ( example of display) to be described as below.

	Current type (PVC sleeve)	New type (PET sleeve)
The look (CE04 type)		
The look (CE69* type)		

### 3. Reason of the change

Rubycon already has a lineup of PET sleeve products used as an environment-friendly solution. Our goal is to stop using PVC sleeving unless specifically requested.. The global regulation for REACH restrict the use of Phthalate(plasticizer) and Organostannic compounds(stabilizer) which are contained in PVC sleeve. In addition, customer requests for PET sleeve has been increasing.. Under such circumstances and in order to satisfy such requirement, we will standardize the material of the sleeve to PET. Please note, the choice to convert to PET is consistent with a majority of AE suppliers.

### 4. Schedule of change

The change is expected to start from April, 2011 as a running change. If there are any concerns, please contact your individual sales office in advance. Changes to PET will be automatic once PVC inventory is depleted.

### 5. Reliability

The change is only limited to the material of the sleeve and all other specifications (such as electrical characteristic and size) and electrical performance remain unchanged.

There is no change on our production line as well.

Since PET sleeves have been used for high temperature applications (125°C) and many customers have already changed to PET sleeve, we are confident that there will not any inconvenience and problem by this change.

Rubycon Corporation.