

# Product Change Notification

<b>PCN Tracking Number:</b>	MK1--150018-E-1A
<b>Product Category:</b>	Electromechanical relays
<b>Product series:</b>	JS and JSL relays with Silver-Cadmium (AgCdO) contacts.
<b>Date:</b>	23 July, 2015

## Change description:

All JS and JSL relay types with cadmium (Cd) containing contact material, AgCdO, (contact material code "NIL" or "E" in the part number) will be replaced by JS and JSL relay types with cadmium free contact material. Three (3) different replacement options will be available as alternative types. See list on page 2 for general- and actual currently used JS and JSL relay part numbers with AgCdO contacts and recommended Cd free replacement relay part numbers.

## JS relay series with AgCdO contacts:

<b>JS-**E(-K)(-**)</b>
<b>JS-(**)ME-K(-**)</b>
<b>JS-(**)-K(-V3)</b>
<b>JS-(**)M-K(-V3)</b>
<b>JSL(-;D)(**)-K(-**)</b>
<b>JSL(-;D)(**)M-K(-**)</b>

## Reason for change:

Expiration on 21 July 2016 of the exemption 8(b) on the restriction of the use of hazardous substances in electrical and electronic equipment [RoHS], listed in Annex III of the EU Directive 2011/65/EU for the use of cadmium (Cd) compounds in electrical contacts. After this date the use of Cadmium compound used in the above listed relays is prohibited. Since EEE manufacturers will only be able to use compliant parts, it means that at the latest from that date onwards, the listed relays will not be available anymore.

## Anticipated impact:

Start actions to evaluate and replace the Cd containing JS and JSL relays by Cd free relays. Fujitsu offers alternative solutions and replacement (JS) relay types. Depending on the application and specific contact load it may be possible to use existing relay types, with AgSnO<sub>2</sub> or AgNi contact material. In other cases, please consider the information regarding recommended pin to pin replacement types and the schedule at next pages, including availability of samples, safety approvals and planned production start of Cd free relays. Samples schedule is for Safety marked relays. Samples for evaluation will be available before issue of safety certificates, but without (updated) safety marking in that case.

## Customer response:

Please send your concerns and requests for specific part numbers, samples, technical support to your Fujitsu Components sales contact person or to your Fujitsu Components Account manager.

## Disclosure information:

None of this information shall be disclosed or forwarded to other suppliers or distributed outside your company without written approval from Fujitsu Components America Inc.

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**Recommended replacement part numbers:**

<b>Current JS</b> AgCdO types	<b>Replacement option 1</b> Existing sealed Cd free AgSnO <sub>2</sub> types with improved specs for N.O. contact life. Under safety approval	<b>Replacement option 2</b> NEW Cd free sealed types. Similar specs as AgCdO JS types. R = No Au plating G = Au plating. Under safety approval.	<b>Replacement option 3</b> NEW Cd free open types, Similar specs as AgCdO JS types. R = no Au plating G = Au plating Under safety approval.
AC250V/DC24V, 8A Resistive load 100k N.O. / 100k N.C.	AC250V/DC24V, 8A Resistive load. Safety approval target: 100k N.O. / 50k N.C.	AC250V/DC24V, 8A Resistive load Safety approval target: 100k N.O. / 100k N.C.	AC250V/DC24V, 8A Resistive load Safety approval target: 100k N.O. / 100k N.C.

**Recommended replacement relay types, general JS part numbers**

JS-(**)E-K(-**)	JS-(**)N-K(-**)	JS-(**)(R;G)-K(-**)	JS-(**)R(-**)
JS-(**)ME-K(-**)	JS-(**MN-K(-**)	JS-(**M(R;G)-K(-**)	JS-(**)(MR)(-**)
JS-(**)-K(-V3)	JS-(**N-K(-V3)	JS-(**G-K(-V3)	JS-(**G(-V3)
JS-(**M-K(-V3)	JS-(**MN-K(-V3)	JS-(**G-K(-V3)	JS-(**MG(-V3)
JSL(-;D)(**)-K(-**)	JSL(-;D)(**N-K(-**)	JSL(-;D)(**)(R;G)-K(-**)	JSL(-;D)(**R(-**)
JSL(-;D)(**M-K(-**)	JSL(-;D)(**MN-K(-**)	JSL(-;D)(**M(R;G)-K(-**)	JSL(-;D)(**M(R;G)(-**)

**Recommended replacement relays for specific JS part numbers**

JS-12E-K	JS-12N-K	JS-12(R;G)-K	JS-12(R;G)
JS-12-K	JS-12N-K	JS-12(R;G)-K	JS-12(R;G)
JS-12-K-C	JS-12N-K-C	JS-12(R;G)-K-C	JS-12(R;G)-C
JS-12-K-V3	JS-12N-K-V3	JS-12GK-V3	JS-12G-V3
JS-12ME-K	JS-12MN-K	JS-12M(R;G)-K	JS-12M(R;G)
JS-12M-K	JS-12MN-K	JS-12M(R;G)-K	JS-12M(R;G)
JS-18-K	JS-18N-K	JS-18(R;G)-K	JS-18(R;G)
JS-18-K-V3	JS-18N-K-V3	JS-18GK-V3	JS-18G-V3
JS-18ME-K	JS-18MN-K	JS-18M(R;G)-K	JS-18M(R;G)
JS-24E-K	JS-24N-K	JS-24(R;G)-K	JS-24(R;G)
JS-24-K	JS-24N-K	JS-24(R;G)-K	JS-24(R;G)
JS-24-K-C	JS-24N-K-C	JS-24(R;G)-K-C	JS-24(R;G)-C
JS-24-K-ML	JS-24N-K-ML	JS-24(R;G)-K-ML	JS-24(R;G)-ML
JS-24-K-V3	JS-24N-K-V3	JS-24GK-V3	JS-24G-V3
JS-24ME-K	JS-24MN-K	JS-24M(R;G)-K	JS-24M(R;G)
JS-24M-K	JS-24MN-K	JS-24M(R;G)-K	JS-24M(R;G)
JS-48-K	JS-48N-K	JS-48(R;G)-K	JS-48(R;G)
JS-5E-K	JS-5N-K	JS-5(R;G)-K	JS-5(R;G)
JS-5-K	JS-5N-K	JS-5(R;G)-K	JS-5(R;G)
JS-5-K-SZ	JS-5N-K-SZ	JS-5(R;G)-K-SZ	JS-5(R;G)-SZ
JS-5-K-SZ2	JS-5N-K-SZ2	JS-5(R;G)-K-SZ2	JS-5(R;G)-SZ2
JS-5ME-K	JS-5MN-K	JS-5M(R;G)-K	JS-5M(R;G)
JS-5M-K	JS-5MN-K	JS-5M(R;G)-K	JS-5M(R;G)
JS-60-K	JS-60N-K	JS-60(R;G)-K	JS-60(R;G)
JS-6-K	JS-6N-K	JS-6(R;G)-K	JS-6(R;G)
JS-9E-K	JS-9N-K	JS-9(R;G)-K	JS-9(R;G)
JS-9-K	JS-9N-K	JS-9(R;G)-K	JS-9(R;G)
JSL-3-K	JSL-3N-K	JSL-3(R;G)-K	JSL-3(R;G)

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<b>Options</b>	<b>Replacement option 1</b>	<b>Replacement option 2</b>	<b>Replacement option 3</b>
Samples	Now	Nov. 30, 2015	Jan. 2016
Technical reports	Oct. 30, 2015	Oct. 30, 2015	Dec, 31, 2015
Safety approvals VDE / UL	Oct. 30, 2015	Oct . 30, 2015	Dec, 31, 2015
Mass production	Nov 2015	Q1, CY2016	Q1, CY2016