

## Listing of PCNs

### Introduction

This file contains PCN information for the product(s) referenced by the file name.

Note that the file may contain multiple PCNs. If this is the case, they are arranged in chronological order, so to see the most recent PCN scroll to the end.

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### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

## Resistors Product Change Notification

<b>PCN Number</b>	PCN-2018-RBU03
<b>PCN Title</b>	CR Series – Standard reel quantity change
<b>PCN Date</b>	27/03/2018
<b>Type of Change</b>	<input type="checkbox"/> End of Life Notification <input type="checkbox"/> Manufacturing Facility Change or Addition <input checked="" type="checkbox"/> Datasheet Specification Change <input type="checkbox"/> Other: <span style="float: right;"> <input type="checkbox"/> Material Change  <input type="checkbox"/> Process Change  <input type="checkbox"/> Design Change         </span>
<b>Manufacturing Location(s) Affected</b>	Bedlington, UK
<b>Date of Change Implementation</b>	April 2018

Products Affected		
Product Series	Product Type(s)	Datasheet Link
CR	CR0805	<a href="http://www.ttelectronics.com/sites/default/files/resistors-datasheets/CR.pdf">http://www.ttelectronics.com/sites/default/files/resistors-datasheets/CR.pdf</a>
	CR1206	
	CR2010	
	CR2512	

Change Detail	
<b>Description of Change</b>	TT Electronics will increase the standard pack quantity, on the affected product types, from 400 to 800 pieces.
<b>Reason for Change</b>	This will bring the standard pack quantity in line with the minimum order quantity and reduce the amount of reels per shipment.
<b>Implementation Plan</b>	The change will be implement on orders manufactured during April 2018
<b>Customer Impact</b>	400 piece reels are still available on request and must be specified when ordering

<b>Recommendations</b>	N/A
<b>Availability of Previously Manufactured Product</b>	N/A
<b>Availability of Approval Samples</b>	N/A
<b>Sales Contacts</b>	<p>Americas: Mike Graham <a href="mailto:mike.graham@ttelelectronics.com">mike.graham@ttelelectronics.com</a>          Asia: Janson Chuen <a href="mailto:janson.chuen@ttelelectronics.com">janson.chuen@ttelelectronics.com</a>          Europe (EMEA): Klaus Zwerschina <a href="mailto:klaus.zwerschina@ttelelectronics.com">klaus.zwerschina@ttelelectronics.com</a></p> <p><a href="http://www.ttelelectronicsresistors.com/sales.php">http://www.ttelelectronicsresistors.com/sales.php</a></p>

<b>Approval</b>			
	<b>Name</b>	<b>Title</b>	<b>Date</b>
<b>Issued by</b>	David Peters	Product Line Manager	27/03/2018
<b>Approved by</b>	Barry Peters	VP Product Management and Engineering	27/03/2018

# Resistors Product Change Notification

<b>PCN Number</b>	PCN-2025-RBU02
<b>PCN Title</b>	Removal of EN/IECQ-CECC from some CR, MFR & RC Types
<b>PCN Date</b>	28 <sup>th</sup> February 2025
<b>Type of Change</b>	<input type="checkbox"/> End of Life Notification <input type="checkbox"/> Material Change <input type="checkbox"/> Manufacturing Facility Change or Addition <input type="checkbox"/> Process Change <input checked="" type="checkbox"/> Datasheet Specification Change <input type="checkbox"/> Design Change <input type="checkbox"/> Other:
<b>Manufacturing Location(s) Affected</b>	TT Electronics Bedlington - Welwyn (UK)
<b>Date of Change Implementation</b>	1 <sup>st</sup> of March 2025

Products Affected	
TT Series	Datasheet Link
RC-65	<a href="https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/RC.pdf">https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/RC.pdf</a> <a href="https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/MFR.pdf">https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/MFR.pdf</a> <a href="https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/CR.pdf">https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/CR.pdf</a>
RC-70	
MFR5	
CR2010	
CR2512	

Change Detail	
<b>Description of Change</b>	TT Electronics is removing the option of EN or IECQ-CECC release from the products listed in APPENDIX A. The products are still available with commercial release. Please note that products with commercial release are in no way different from those which have been supplied with EN or IECQ-CECC release. Furthermore, there will be no change at all to any of the products, the processes, or the locations of manufacture.
<b>Reason for Change</b>	The demand for EN or IECQ-CECC release on the affected products is too low to justify the continued maintenance of this option.
<b>Implementation Plan</b>	N/A
<b>Customer Impact</b>	In most cases the requirement for EN or IECQ-CECC release is not reflected in our MPN, so no MPN changes are required as a result of this PCN. The one exception is IECQ-CECC40101-804 (RC series), where the part number adopts the suffix 804. Any RC65 part numbers with the suffix 804 will be obsolete. The commercial released alternatives in this case are, for example: <ul style="list-style-type: none"> <li>RC65Y-31K6B-804 (Pb-free terminations) may be replaced by RC65Y-31K6BI</li> <li>RC65Y-31K6BPB-804 (SnPb terminations) may be replaced by RC65Y-31K6BPB.</li> </ul>
<b>Recommendations</b>	
<b>Availability of Previously Manufactured Product</b>	N/A

<b>Availability of Approval Samples</b>	N/A
<b>Sales Contacts</b>	Americas: Greg Hawkins <a href="mailto:greg.hawkins@ttelelectronics.com">greg.hawkins@ttelelectronics.com</a> Europe: Simon Webb <a href="mailto:simon.webb@ttelelectronics.com">simon.webb@ttelelectronics.com</a> Asia: Praveen Kumar <a href="mailto:Praveen.Kumar@ttelelectronics.com">Praveen.Kumar@ttelelectronics.com</a>

Approvals			
	Name	Title	Date
<b>Issued by</b>	Mario Garsi	Product Line Manager	21 <sup>st</sup> February 2025
<b>Approved by</b>	Klaus Zwerschina	VP Sales	21 <sup>st</sup> February 2025

## Appendix A

<u>Product Series</u>	<u>Product Type</u>	<u>Standards to which Release is no longer offered</u>
<u>RC</u>	RC65	EN140101-806, IECQ-CECC40101-004, IECQ-CECC40101-804
	RC70	IECQ-CECC40101-004, IECQ-CECC40101-804
<u>MFR</u>	MFR5	IECQ-CECC40101-019, IECQ-CECC40101-803
<u>CR</u>	CR2010	IECQ-CECC40401-008
	CR2512	IECQ-CECC40401-008

Note also that EN or IECQ-CECC release is still available for the following product types which are in the same series as those listed above: RC55, MFR4, CR0805 and CR1206.

Appendix B

RC Series

-Former Data Sheet Release:

The requirements of the following standards are met or exceeded by the corresponding RC series products above.

EN140101-806 Requirements		B	C
Power rating @70°C	W	0.4	0.5
Qualified resistance range	ohms	56R – 820K	56R – 1M0
Limiting element voltage	V	300	500
Isolation voltage	V	500	750
TCR <sup>1</sup>	ppm/°C	10, 15, 25, 50	
Resistance tolerance	%	0.1, 0.25, 0.5, 1	

IECQ-CECC 40101-004 Requirements		H	J	K	L
Power rating @70°C	W	0.063	0.125	0.25	0.5
Qualified resistance range	ohms	1R0 – 1M0		10R – 1M0	
Limiting element voltage	V	200	250		350
Isolation voltage	V	280	350		500
TCR <sup>1</sup>	ppm/°C	15, 25, 50, 100			
Resistance tolerance	%	0.05, 0.1, 0.25, 0.5, 1			

IECQ-CECC 40101-804 Requirements		A	B	C
Power rating @70°C	W	0.125	0.25	0.5
Qualified resistance range	ohms	1R0 – 1M0		10R – 1M0
Limiting element voltage	V	200	250	350
Isolation voltage	V	280	350	500
TCR <sup>1</sup>	ppm/°C	15, 25, 50		
Resistance tolerance	%	0.1, 0.25, 0.5, 1		

Note 1: In these standards TCRs are not specified for values <5R0, and for values ≥5R0 and <10R the TCR limit is 2 x the stated figure.

-New Data Sheet Release:

The requirements of the following standards are met or exceeded by the corresponding RC series products above.

EN140101-806 Requirements		B
Required power rating @70°C	W	0.4
Qualified resistance range	ohms	56R – 820K
Required limiting element voltage	V	300
Required isolation voltage	V	500
Required TCR <sup>1</sup>	ppm/°C	10, 15, 25, 50
Required resistance tolerance	%	0.1, 0.25, 0.5, 1

IECQ-CECC 40101-004 Requirements		H	J	K
Required power rating @70°C	W	0.063	0.125	0.25
Qualified resistance range	ohms	1R0 – 1M0		
Required limiting element voltage	V	200	250	
Required isolation voltage	V	280	350	
Required TCR <sup>1</sup>	ppm/°C	15, 25, 50, 100		
Required resistance tolerance	%	0.05, 0.1, 0.25, 0.5, 1		

IECQ-CECC 40101-804 Requirements		A	B
Required power rating @70°C	W	0.125	0.25
Qualified resistance range	ohms	1R0 – 1M0	
Required limiting element voltage	V	200	250
Required isolation voltage	V	280	350
Required TCR <sup>1</sup>	ppm/°C	15, 25, 50	
Required resistance tolerance	%	0.1, 0.25, 0.5, 1	

Note 1: In these standards TCRs are not specified for values <5R0, and for values ≥5R0 and <10R the TCR limit is 2 x the stated figure.

**MFR Series**

-Former Data Sheet Release:

IECQ-CECC 40101 - 019 Requirements		FZ	FX	EZ	EX
Power rating at 70°C	watts	0.25	0.25	0.5	0.5
Resistance range	ohms	1 to 1M	1 to 1M	10 to 1M0	10 to 1M
Limiting element voltage	volts	250	250	350	350
TCR	ppm/°C	100	250	100	250
Resistance tolerance	%	5.1 to 9.1 : 200 1	5.1 to 9.1 : 500 1	1	1

IECQ-CECC 40101 - 803 Requirements		BC	BK	CC	CK
Power rating at 70°C	watts	0.125	0.125	0.25	0.25
Resistance range	ohms	10 to 1M	10 to 1M	10 to 1M	10 to 1M
Limiting element voltage	volts	200	200	250	250
TCR	ppm/°C	50	100	50	100
Resistance tolerance	%	0.5, 1	0.5, 1	0.5, 1	0.5, 1

These tables indicate the CECC specification requirements, and these are met or exceeded by the corresponding MFR series products.

-New Data Sheet Release:

The requirements of the following standards are met or exceeded by the corresponding MFR series products above.

IECQ-CECC 40101-019 Requirements		FZ	FX
Required power rating @70°C	W	0.25	
Qualified resistance range	ohms	1R0 – 1M0	
Required limiting element voltage	V	250	
Required TCR	ppm/°C	≥5R1 - ≤9R1: 200, >9R1: 100	≥5R1 - ≤9R1: 500, >9R1: 250
Required resistance tolerance	%	1	

IECQ-CECC 40101-803 Requirements		BC	BK
Required power rating @70°C	W	0.125	
Qualified resistance range	ohms	10R – 1M0	
Required limiting element voltage	V	200	
Required TCR	ppm/°C	50	100
Required resistance tolerance	%	0.5, 1	

## CR Series

-Former Data Sheet Release:

The requirements of the following standards are met or exceeded by the corresponding CR products above.

EN140401-802 Requirements		RR2012M	RR3216M
Power rating at 70°C	W	0.125	0.25
Resistance range	Ω	1R5 – 10M	1R5 – 10M
Limiting element voltage	V	150	200
TCR -55 to +125°C	ppm/°C	<10R: 200, 10R-1M0: 100, >1M0:200	
Resistance tolerance	%	<10R: 5, 10R-1M0: 1, 2, 5, >1M0: 5	
Ambient temperature range	°C	-55 to +125	

  

IECQ-CECC 40401-004 Requirements		CR0805	CR1206
Power rating at 70°C	W	0.125	0.25
Resistance range	Ω	1R0 – 10M	1R0 – 10M
Limiting element voltage	V	100	200
TCR -55 to +125°C	ppm/°C	<10R: 200, 10R-1M0: 100, >1M0:200	
Resistance tolerance	%	1, 2, 5	
Ambient temperature range	°C	-55 to +125	

  

IECQ-CECC 40401-008 Requirements		CR0603 <sup>1</sup>	CR0805	CR1206	CR2010	CR2512
Power rating at 70°C	W	0.1	0.125	0.25	0.5	1
Resistance range	Ω	1R0 – 10M		1R0 – 10M	1R0 – 1M0	
Limiting element voltage	V	75	100	200	400	500
TCR -55 to +155°C	ppm/°C	<10R: 200, 10R-1M0: 100, >1M0:250				
Resistance tolerance	%	0.5, 1, 2, 5	0.1, 0.25, 0.5, 1, 2, 5		0.25, 0.5, 1, 2, 5	
Ambient temperature range	°C	-55 to +155				

Note 1: CR0603 meets the requirements of IECQ-CECC 40401-008. Certification pending.

IECQ-CECC 40401-003 Requirements		CR0805	CR1206
Power rating at 70°C	W	0.063	0.125
Resistance range	Ω	1R0 – 3M0	1R0 – 5M0
Limiting element voltage	V	100	200
TCR -55 to +125°C	ppm/°C	<5R0: 500, 5R0-10R: 350, 10R-3M0: 100, >3M0:250	
Resistance tolerance	%	0.5, 1, 2, 5	
Ambient temperature range	°C	-55 to +125	

-New Data Sheet Release:

The requirements of the following standards are met or exceeded by the corresponding CR products above.

EN140401-802 Requirements		RR2012M	RR3216M
Required power rating at 70°C	W	0.125	0.25
Qualified resistance range	Ω	1R5 – 10M	1R5 – 10M
Required limiting element voltage	V	150	200
Required TCR -55 to +125°C	ppm/°C	<10R: 200, 10R-1M0: 100, >1M0:200	
Required resistance tolerance	%	<10R: 5, 10R-1M0: 1, 2, 5, >1M0: 5	
Required ambient temperature range	°C	-55 to +125	

  

IECQ-CECC 40401-004 Requirements		CR0805	CR1206
Required power rating at 70°C	W	0.125	0.25
Qualified resistance range	Ω	1R0 – 10M	1R0 – 10M
Required limiting element voltage	V	100	200
Required TCR -55 to +125°C	ppm/°C	<10R: 200, 10R-1M0: 100, >1M0:200	
Required resistance tolerance	%	1, 2, 5	
Required ambient temperature range	°C	-55 to +125	

  

IECQ-CECC 40401-008 Requirements		CR0805	CR1206
Required power rating at 70°C	W	0.125	0.25
Qualified resistance range	Ω	1R0 – 10M	1R0 – 10M
Required limiting element voltage	V	100	200
Required TCR -55 to +155°C	ppm/°C	<10R: 200, 10R-1M0: 100, >1M0:250	
Required resistance tolerance	%	0.1, 0.25, 0.5, 1, 2, 5	
Required ambient temperature range	°C	-55 to +155	

  

IECQ-CECC 40401-003 Requirements		CR0805	CR1206
Required power rating at 70°C	W	0.063	0.125
Qualified resistance range	Ω	1R0 – 3M0	1R0 – 5M0
Required limiting element voltage	V	100	200
Required TCR -55 to +125°C	ppm/°C	<5R0: 500, 5R0-10R: 350, 10R-3M0: 100, >3M0:250	
Required resistance tolerance	%	0.5, 1, 2, 5	
Required ambient temperature range	°C	-55 to +125	