

# Resistors Product Change Notification

<b>PCN Number</b>	PCN-2025-RBU10
<b>PCN Title</b>	Changes to PFC family
<b>PCN Date</b>	11 <sup>th</sup> June 2025
<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 checked="" type="checkbox"/> Other: Ordering Part Number Change <input type="checkbox"/> Material Change <input type="checkbox"/> Process Change <input type="checkbox"/> Design Change
<b>Manufacturing Location(s) Affected</b>	TT Electronics Plano
<b>Date of Change Implementation</b>	11 <sup>th</sup> of June 2025

Products Affected	
TT Series	Datasheet Link
PFC	<a href="https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/PFC.pdf">https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/PFC.pdf</a>

Change Detail	
<b>Description of Change</b>	<p>TT Electronics is adding new detail to the datasheet of PFC family and enhancing the Ordering Procedure with uniform part number coding.</p> <p>Datasheet change (See <b>Appendix A</b>):</p> <p>1-ESD Sensitivity value updated for each size</p> <p>Ordering Procedure enhanced and simplified (<b>Appendix B</b>):</p> <p>2-From 2 Ordering Procedures ('European (Welwyn)', 'USA(IRC)') to one single Ordering Procedure</p> <p>3- New Global part numbers should be used going forward but old part numbers are still orderable</p> <p>All the crossing included into Excel File distributed with this PCN, with the name as <b>Appendix B</b>: PCN-2025-RBU10 PFC COMMERCIAL SERIES PART NUMBER CHANGE APPENDIX B</p>
<b>Reason for Change</b>	Adding ESD detail at size-specific level and reducing confusion and order handling mistakes from customer purchasing departments.
<b>Implementation Plan</b>	N/A
<b>Customer Impact</b>	For logistic, the Ordering Part Number for future order is into new data sheet and into cross Excel file.
<b>Recommendations</b>	In case of doubts about the new Ordering Part number contact local TT Electronics experts

<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@ttelectronics.com">greg.hawkins@ttelectronics.com</a> Europe: Simon Webb <a href="mailto:simon.webb@ttelectronics.com">simon.webb@ttelectronics.com</a> Asia: Praveen Kumar <a href="mailto:Praveen.Kumar@ttelectronics.com">Praveen.Kumar@ttelectronics.com</a>

Approvals			
	Name	Title	Date
<b>Issued by</b>	Mario Garsi	Product Line Manager	11 <sup>th</sup> June 2025
<b>Approved by</b>	Klaus Zwerschina	VP Sales	11 <sup>th</sup> June 2025

## Appendix A

1-ESD Sensitivity value added for each size

Current data sheet:

### Electrical Data

Model	Power Rating (70°C)	Max Voltage Rating ( $\leq \sqrt{P \times R}$ )	Temperature Range	ESD Sensitivity	Noise	Termination	Substrate
W0402	50mW	75V	-65°C to +150°C	2KV to 4KV (HBM)	<-25dB	100% matte tin or 60/40 SnPb plated over nickel barrier	96.5% Alumina
W0603	100mW	75V					
W0805	250mW	100V					
W1206	333mW	200V					

New data sheet:

### Electrical Data

		PFC0402	PFC0603	PFC0805	PFC1206
Power rating @70°C	mW	50	100	250	333
Rated operating voltage not to exceed $\sqrt{P \times R}$	V	75		100	200
Resistance range	ohms	15R to 30K	10R to 100K	10R to 267K	10R to 1M0
Tolerance	%	0.1, 0.25, 0.5, 1, 2, 5			
TCR	ppm/°C	10, 15, 25, 50, 100 <sup>1</sup>			
ESD sensitivity HBM	kV	0.5	1	1.5	2
Noise	dB	<-25			
Operating temperature	°C	-65 to 150			
Values		E24 or E192			

Note that all products with size 0402 and SnPb finish and all products with values <10R are still available on the datasheet at the following link: <https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Datasheet/pfc-s.pdf>

## Appendix B

All the crossing included into Excel File distributed with this PCN, with the name as **Appendix B**:

PCN-2025-RBU10 PFC COMMERCIAL SERIES PART NUMBER CHANGE APPENDIX B.xlsx

### Existing Ordering Procedure:

European (Welwyn) Part Number: **W1206R-01-1K0BI** (1206, 100ppm/°C, 1 kilohm ±0.1%, Pb-free)

W	1	2	0	6	R	:	0	1	-	1	K	0	B	I
1	2		3			4		5		6				

1	2	3	4	5	6
Type	Size	TCR	Value	Tolerance	Termination & Packing
W=PFC	0402	R-12 = ±10ppm/°C	E24 = 3/4 characters	B = ±0.1%	I = Pb-free, Standard pack
	0603	R-11 = ±15ppm/°C	E96 = 3/4 characters	D = ±0.5%	PB = SnPb finish, Standard Pack
	0805	R = ±25ppm/°C	R = ohms	F = ±1%	All sizes
	1206	R-02 = ±50ppm/°C	K = kilohms	G = ±2%	Up to 5000/reel
		R-01 = ±100ppm/°C	M = megohms	J = ±5%	

USA (IRC) Commercial Part Number: **PFC-W1206LF-01-1001-B** (1206, 100ppm/°C, 1 kilohm ±0.1%, Pb-free)

P	F	C	-	W	1	2	0	6	L	F	:	0	1	-	1	0	0	1	-	B
1	2		3			4		5		6										

1	2	3	4	5	6	7
Family	Model	Termination	TCR	Value	Tolerance	Packing
PFC	W0402	R = SnPb (60/40)	12 = ±10ppm/°C	3 digits + multiplier	B = ±0.1%	All sizes Up to 5000/reel
	W0603	LF = Pb-free (100%Sn)	11 = ±15ppm/°C	R = ohms for values <100 ohms	D = ±0.5%	
	W0805		03 = ±25ppm/°C		F = ±1%	
	W1206		02 = ±50ppm/°C		G = ±2%	
			01 = ±100ppm/°C		J = ±5%	

### New Ordering Procedure:

Example: **PFC0402LFD1002BT10** (0402, 25ppm/°C at 10 kilohms ±0.1%, Pb-free)

P	F	C	0	4	0	2	L	F	D	1	0	0	2	B	T	1	0	
1	2		3			4		5		6		7						

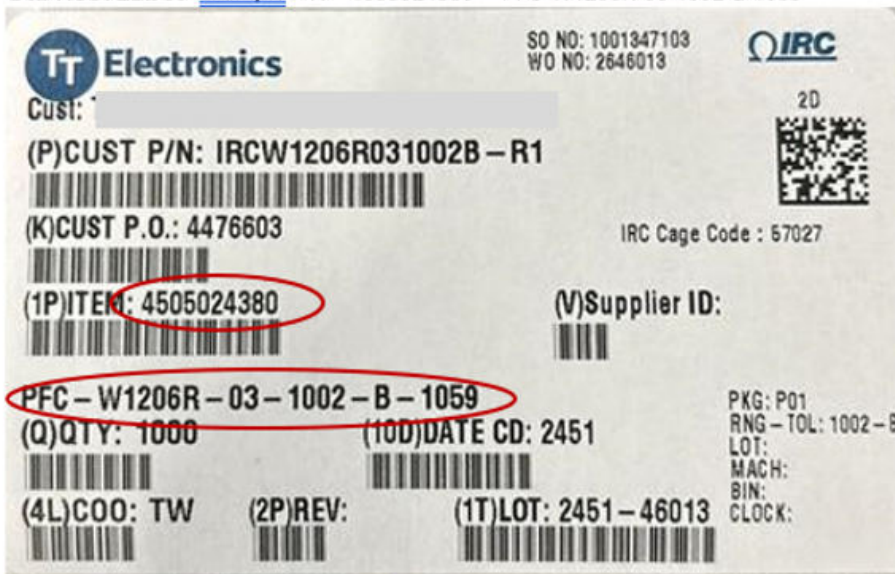
1	2	3	4	5	6	7
Series	Size	Termination	TCR (ppm/°C)	Value	Tolerance	Packing
PFC	0402	LF = Pb-free (100%Sn)	T = ±10	3 digits + multiplier	B = ±0.1%	Pb-free (LF) product
	0603	PB = SnPb (60/40)	Y = ±15	R = ohms for values <100 ohms	C = ±0.25%	T10 0402 10,000/reel
	0805	(0603, 0805, 1206 only)	D = ±25		D = ±0.5%	T5 0603, 0805, 1206 5000/reel
	1206		C = ±50		F = ±1%	T1 All sizes <sup>1</sup> 1000/reel
			Z = ±100		G = ±2%	SnPb (PB) product
					J = ±5%	T1 0603, 0805, 1206 1000/reel

Note 1: Non-standard packing option – consult factory for availability.

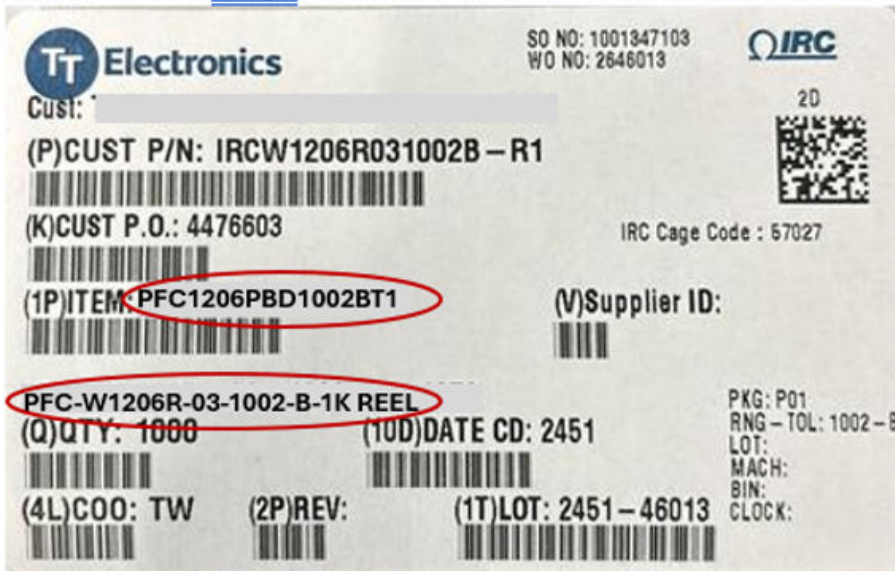
See below a comparison example between current and new labels:

**Appendix B: Example Label changes**

**Old Reel Label** [example](#) P/N 4505024380 PFC-W1206R-03-1002-B-1059



**New Reel Label** [example](#) P/N PFC1206PBD1002BT1 PFC-W1206R-03-1002-B-1K REEL



Part Vend	Part Number	WH	Description
IRC	W0402R032432B-R1	EU	24.3K OHM .05W.1% 25PPM
IRC	W0402R037151B-R1	EU	7.15K OHM .05W.1% 25PPM
IRC	W0805LF121001B-R5	EU	1K OHM .1W .1% 10PPM
IRC	W0603LF0349R9B-R1	EU	49.9 OHM .1W .1% 25PPM
IRC	W0603LF123160B-R1	EU	316 OHM .1W .1% 10PPM
IRC	W0603LF123320B-R1	EU	332 OHM .1W .1% 10PPM
IRC	W0603LF123830B-R1	EU	383 OHM .1W .1% 10PPM
IRC	W0603LF034420B-R1	EU	442 OHM .1W .1% 25PPM
IRC	W0603LF124640B-R1	EU	464 OHM .1W .1% 10PPM
IRC	W0603LF128760B-R5	EU	876 OHM .1W .1% 10PPM
IRC	W0603R031001B-R1	EU	1K OHM .1W.1% 25PPM
IRC	W0603LF121201B-R1	EU	1.2K OHM .1W .1% 10PPM
IRC	W0603R031211B-R1	EU	1.21K OHM .1W.1% 25PPM
IRC	W0603LF031211B-R1	EU	1.21K OHM .1W .1% 25PPM
IRC	W0603LF122001B-R1	EU	2K OHM .1W .1% 10PPM
IRC	W0603R032001B-R1	EU	2K OHM .1W.1% 25PPM
IRC	W0603LF032001B-R1	EU	2K OHM .1W .1% 25PPM
IRC	W0603ASLF123321B-R1	EU	3.32K OHM .1W .1% 10PPM
IRC	W0603LF123361B-R1	EU	3.36K OHM .1W .1% 10PPM
IRC	W0603ASLF123481B-R1	EU	3.48K OHM .1W .1% 10PPM
IRC	W0603R033481B-R1	EU	3.48K OHM .1W.1% 25PPM
IRC	W0603R034021B-R1	EU	4.02K OHM .1W.1% 25PPM
IRC	W0603LF124701B-R5	EU	4.7K OHM .1W .1% 10PPM
IRC	W0603R034991B-R1	EU	4.99K OHM .1W.1% 25PPM
IRC	W0603LF034991B-R1	EU	4.99K OHM .1W .1% 25PPM
IRC	W0603ASLF125901B-R1	EU	5.9K OHM .1W .1% 10PPM
IRC	W0603R031002B-R1	EU	10K OHM .1W.1% 25PPM
IRC	W0603LF031002B-R1	EU	10K OHM .1W .1% 25PPM
IRC	W0603R031022B-R1	EU	10.2K OHM .1W.1% 25PPM
IRC	W0603LF031022B-R1	EU	10.2K OHM .1W .1% 25PPM
IRC	W0603R031102B-R1	EU	11K OHM .1W.1% 25PPM
IRC	W0603LF031102B-R1	EU	11K OHM .1W .1% 25PPM
IRC	W0603LF031152B-R1	EU	11.5K OHM .1W .1% 25PPM
IRC	W0603R031332B-R1	EU	13.3K OHM .1W.1% 25PPM
IRC	W0603LF031332B-R1	EU	13.3K OHM .1W .1% 25PPM
IRC	W0603R031502B-R1	EU	15K OHM .1W.1% 25PPM
IRC	W0603LF031502B-R1	EU	15K OHM .1W .1% 25PPM
IRC	W0603R031602B-R1	EU	16K OHM .1W.1% 25PPM
IRC	W0603LF031622B-R1	EU	16.2K OHM .1W .1% 25PPM
IRC	W0603ASLF121782B-R1	EU	17.8K OHM .1W .1% 10PPM
IRC	W0603ABLF071782B-R1	EU	17.8K OHM .1W .1% 25PPM
IRC	W0603R032002B-R1	EU	20K OHM .1W.1% 25PPM
IRC	W0603LF032702B-R1	EU	27K OHM .1W .1% 25PPM
IRC	W0603LF123012B-R1	EU	30.1K OHM .1W .1% 10PPM
IRC	W0603LF123012B-R5	EU	30.1K OHM .1W .1% 10PPM
IRC	W0603R033012B-R1	EU	30.1K OHM .1W.1% 25PPM
IRC	W0603LF033202B-R1	EU	32K OHM .1W .1% 25PPM
IRC	W0603LF033322B-R1	EU	33.2K OHM .1W .1% 25PPM
IRC	W0603R033652B-R1	EU	36.5K OHM .1W.1% 25PPM

IRC	W0603R034752B-R1	EU	47.5K OHM .1W.1% 25PPM
IRC	W0603R034992B-R1	EU	49.9K OHM .1W.1% 25PPM
IRC	W0603R035232B-R1	EU	52.3K OHM .1W.1% 25PPM
IRC	W0603LF035232B-R1	EU	52.3K OHM .1W .1% 25PPM
IRC	W0603R035492B-R1	EU	54.9K OHM .1W.1% 25PPM
IRC	W0603LF035492B-R1	EU	54.9K OHM .1W .1% 25PPM
IRC	W0603R036042B-R1	EU	60.4K OHM .1W.1% 25PPM
IRC	W0603LF036342B-R1	EU	63.4K OHM .1W .1% 25PPM
IRC	W0603R036652B-R1	EU	66.5K OHM .1W.1% 25PPM
IRC	W0603R037152B-R1	EU	71.5K OHM .1W.1% 25PPM
IRC	W0603R037502B-R1	EU	75K OHM .1W.1% 25PPM
IRC	W0603LF037502B-R1	EU	75K OHM .1W .1% 25PPM
IRC	W0603R031003B-R1	EU	100K OHM .1W.1% 25PPM
IRC	W0603LF031003B-R1	EU	100K OHM .1W .1% 25PPM
IRC	W0805R122001A-R1	EU	2K OHM .05% 10PPM 1/4W
IRC	W0805LF0349R9A-R1	EU	49.9 OHM .25W .05% 25PPM
IRC	W0805R034120B-R1	EU	412 OHM .25W .1% 25PPM
IRC	W0805R031691B-R1	EU	1.69K OHM .25W .1% 25PPM
IRC	W0805LF032001B-R1	EU	2K OHM .25W .1% 25PPM
IRC	W0805ABLF073011B-R1	EU	3.01K OHM .25W .1% 25PPM
IRC	W0805R034991B-R1	EU	4.99K OHM .25W .1% 25PPM
IRC	W0805LF034991B-R1	EU	4.99K OHM .25W .1% 25PPM
IRC	W0805R125361B-R1	EU	5.36K OHM .1% 10PPM 1/4W
IRC	W0805LF036491B-R1	EU	6.49K OHM .25W .1% 25PPM
IRC	W0805LF036651B-R1	EU	6.65K OHM .25W .1% 25PPM
IRC	W0805LF038451B-R1	EU	8.45K OHM .25W .1% 25PPM
IRC	W0805R031002B-R1	EU	10K OHM .25W .1% 25PPM
IRC	W0805LF031002B-R1	EU	10K OHM .25W .1% 25PPM
IRC	W0805R021002B-R1	EU	10K OHM .25W .1% 50PPM
IRC	W0805LF031302B-R1	EU	13K OHM .25W .1% 25PPM
IRC	W0805LF032002B-R1	EU	20K OHM .25W .1% 25PPM
IRC	W0805R023092B-R1	EU	30.9K OHM .25W .1% 50PPM
IRC	W0805LF034992B-R1	EU	49.9K OHM .25W .1% 25PPM
IRC	W0805R126982A-R1	EU	69.8K OHM .05% 10PPM 1/4W
IRC	W0805R037322B-R1	EU	73.2K OHM .25W .1% 25PPM
IRC	W0805LF037322B-R1	EU	73.2K OHM .25W .1% 25PPM
IRC	W0805LF031003B-R1	EU	100K OHM .25W .1% 25PPM
IRC	W0805R021003F-R1	EU	100K OHM .25W 1% 50PPM
IRC	W1206LF0310R0B-R1	EU	10 OHM.333W .1% 25PPM
IRC	W1206LF0351R1B-R1	EU	51.1 OHM.333W .1% 25PPM
IRC	W1206R121000B-R1	EU	100 OHM.333W .1% 10PPM
IRC	W1206R151000B-R1	EU	100 OHM.333W .1% 15PPM
IRC	W1206R123100B-R1	EU	310 OHM.333W .1% 10PPM
IRC	W1206LF033240B-R1	EU	324 OHM.333W .1% 25PPM
IRC	W1206LF033500B-R1	EU	350 OHM.333W .1% 25PPM
IRC	W1206LF035230B-R1	EU	523 OHM.333W .1% 25PPM
IRC	W1206R151001B-R1	EU	1K OHM.333W .1% 15PPM
IRC	W1206R152001B-R1	EU	2K OHM.333W .1% 15PPM
IRC	W1206R152401B-R1	EU	2.4K OHM.333W .1% 15PPM
IRC	W1206R122801B-R1	EU	2.8K OHM.333W .1% 10PPM

IRC	W1206R153741B-R1	EU	3.74K OHM.333W .1% 15PPM
IRC	W1206R154701B-R1	EU	4.70K OHM.333W .1% 15PPM
IRC	W1206R155621B-R1	EU	5.62K OHM.333W .1% 15PPM
IRC	W1206R156191B-R1	EU	6.19K OHM.333W .1% 15PPM
IRC	W1206R156811B-R1	EU	6.81K OHM.333W .1% 15PPM
IRC	W1206R157151B-R1	EU	7.15K OHM.333W .1% 15PPM
IRC	W1206R151002B-R1	EU	10K OHM.333W .1% 15PPM
IRC	W1206LF031052B-R1	EU	10.5K OHM.333W .1% 25PPM
IRC	W1206R151202B-R1	EU	12K OHM.333W .1% 15PPM
IRC	W1206R151302B-R1	EU	13K OHM.333W .1% 15PPM
IRC	W1206R151322B-R1	EU	13.2K OHM.333W .1% 15PPM
IRC	W1206R151602B-R1	EU	16K OHM.333W .1% 15PPM
IRC	W1206R151622B-R1	EU	16.2K OHM.333W .1% 15PPM
IRC	W1206R152212B-R1	EU	22.1K OHM.333W .1% 15PPM
IRC	W1206R153882B-R1	EU	38.8K OHM.333W .1% 15PPM
IRC	W1206R154532B-R1	EU	45.3K OHM.333W .1% 15PPM
IRC	W1206R154702B-R1	EU	47K OHM.333W .1% 15PPM
IRC	W1206R124702B-R1	EU	47K OHM.333W .1% 10PPM
IRC	W1206R154752B-R1	EU	47.5K OHM.333W .1% 15PPM
IRC	W1206R156192B-R1	EU	61.9K OHM.333W .1% 15PPM
IRC	W1206R157502B-R1	EU	75K OHM.333W .1% 15PPM
IRC	W1206R159652B-R1	EU	96.5K OHM.333W .1% 15PPM
IRC	W1206R159762B-R1	EU	97.6K OHM.333W .1% 15PPM
IRC	W1206R151003B-R1	EU	100K OHM.333W .1% 15PPM
IRC	W1206R151503B-R1	EU	150K OHM.333W .1% 15PPM
IRC	W1206R152003B-R1	EU	200K OHM.333W .1% 15PPM
IRC	W1206R035003B-R1	EU	500K OHM.333W .1% 25PPM
IRC	W1206R031004B-R1	EU	1M OHM.333W .1% 25PPM
IRC	W1206ABLF16140RA-R1	EU	140 OHM.333W .05% 10PPM
IRC	W1206ABLF161502A-R1	EU	15K OHM.333W .05% 10PPM