

Product Change Notification




Alpha Foil Resistors/January 2023/PCN-ALP-001-2023

External Marking Change (Laser Marking)

DESCRIPTION OF CHANGE: Change of marking of Alpha Ultra Precision Resistor to laser marking from ink marking

CLASSIFICATION OF CHANGE: Marking

Example: FLA Series

BEFORE (Ink Marking)		AFTER (Laser Marking)
		 <ul style="list-style-type: none">1. Laser Marking2. Single Side3. Date Code (6 Digits)4. Full Resistance Value

REASON OF CHANGE: Better productivity and traceability

EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE: No influence on performance, quality and reliability

PRODUCT CATEGORY: Foil resistors (molded/confirmally coated, hermetically sealed), thermosensitive resistors, network resistors, power resistors, thin film resistors

PART NUMBERS AFFECTED: Attached List

TIME SCHEDULE:

Start Shipment Date: January 1st, 2024

Last Time Buy Date: N/A

Last Time Shipment Date: N/A

PRODUCTION IDENTIFICATION: Visually identified as the above images, Product information on packaging label. No mixing within a single Flow Card (lot) will be allowed. Both printed and unprinted parts can be delivered for one order.

QUALIFICATION DATA: N/A

CONTACT INFORMATION

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PART NUMBERS AFFECTED:

CHANGE	AFFECTED PRODUCT	
	Category	Product Series
Laser Marking Single Side DC 6 Digits	Confirmally Coated	FLA*, FLB*, FLC
	Network Resistor	SLD*, SE, SF, SS
Single Side DC 6 Digits	Network Resistor	SM
	Thin Film	TLA*,TLC
	Thermosensitive	NLA*, NLB*,CLA*,CLB*,KLC
	Hermetically Sealed	HG
DC 6 Digits	Transfer Molded	MA, MB, MC, MD
	Power Resistor	PSB, PB, PC, PD, PE
	Hermetically Sealed	HC, HD, HK, HL
	Network Resistor	SC



* Full Resistance Value per MPN



PCN-ALP-001-2022 Attachment**CHANGE**



1. Laser Marking
2. Single Side
3. Date Code (6 Digits)
4. Full Resistance Value per MPN



CHANGE	AFFECTED PRODUCT	
	Category	Product Series
Laser Marking Single Side DC 6 Digits	Confirmally Coated	FLA*, FLB*, FLC
	Network Resistor	SLD*, SE, SF, SS
Single Side DC 6 Digits	Network Resistor	SM
	Thin Film	TLA*, TLC
	Thermosensitive	NLA*, NLB*, CLA*, CLB*, KLC
	Hermetically Sealed	HG
DC 6 Digits	Transfer Molded	MA, MB, MC, MD
	Power Resistor	PSB, PB, PC, PD, PE
	Hermetically Sealed	HC, HD, HK, HL
	Network Resistor	SC

* Full Resistance Value per MPN

MA	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	



MB	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

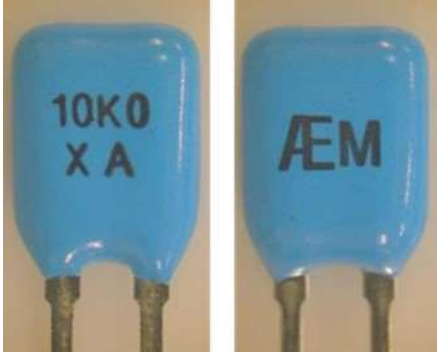

MC	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	



MD	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

Precision Resistor (Confirmally Coated)

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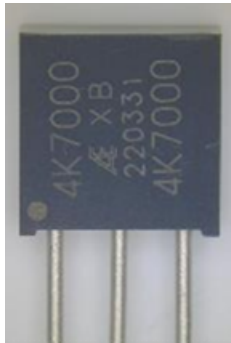
FLA	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	5 Numbers with 1 Alphabet



FLB	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	5 Numbers with 1 Alphabet



FLC	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	5 Numbers with 1 Alphabet

1-2-3 Network Resistor

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SM	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	



SLD1	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet

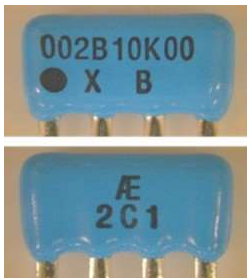

SLD2	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet



Network Resistor

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SE	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 Numbers with 1 Alphabet	



SF	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 Numbers with 1 Alphabet	



SS	Before	After
Image		
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 Numbers with 1 Alphabet	


SC	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	3 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 Numbers with 1 Alphabet	



Precision Thin Film Resistor (Confirmally Coated)



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TLA	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	5 Numbers with 1 Alphabet



TLC	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

NLA	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet

NLB	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet



CLA	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet




CLB	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet

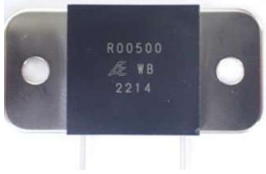

KLC	Before	After
Image		
Marking	Laser	
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	4 Numbers with 1 Alphabet	

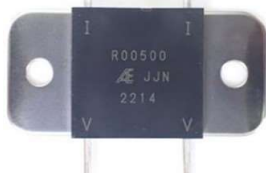
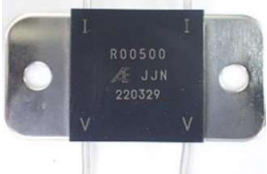
Ultra Precision Resistor (Hermetically Sealed)



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HC, HD, HK, HL	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	



HG	Before	After
Image	 	
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

PB	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

PC	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

PD	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

PE	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

PSB	Before	After
Image		
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	4 Numbers with 1 Alphabet	