

# **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)
10K0 X.A	BOKOGO A XF	1. Laser Marking 2. Single Side 3. Date Code (6 Digits) 4. Full Resistance Value

**REASON OF CHANGE:** Better productivity and traceability

**EXPECTED INFLUENCE ON QUALITY/RELIABILTY/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**

Alpha Electronics Corporation

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#### Alpha Electronics Corp.

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### PART NUMBERS AFFECTED:

CHANGE	AFFECTED PRODUCT	
CHANGE	Category	Product Series
Laser Marking Single Side	Confirmally Coated	FLA*, FLB*, FLC
DC 6 Digits	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
	Transfer Molded	MA, MB, MC, MD
DC 6 Digita	Power Resistor	PSB, PB, PC, PD, PE
DC 6 Digits	Hermetically Sealed	HC, HD, HK, HL
	Network Resistor	SC

<sup>\*</sup> Full Resistance Value per MPN

#### PCN-ALP-001-2022 Attachment

#### CHANGE

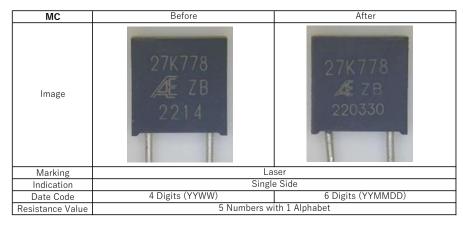
- 1. Laser Marking
- 2. Single Side
- 3. Date Code (6 Digits)
- 4. Full Resistance Value per MPN

CHANGE	AFFECTED PRODUCT		
CHANGE	Category	Product Series	
Laser Marking Single Side	Confirmally Coated	FLA*, FLB*, FLC	
DC 6 Digits	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	
	Transfer Molded	MA, MB, MC, MD	
DC 6 Digita	Power Resistor	PSB, PB, PC, PD, PE	
DC 6 Digits	Hermetically Sealed	HC, HD, HK, HL	
	Network Resistor	SC	

<sup>\*</sup> Full Resistance Value per MPN

MA	Before	After
lmage	15R000 Æ X A 2212	15R000 Æ XA 220330
Marking	Laser	
Indication		le Side
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

MB	Before	After
Image	250K00 Æ ZA 2214	250K00 Æ ZA 220331
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

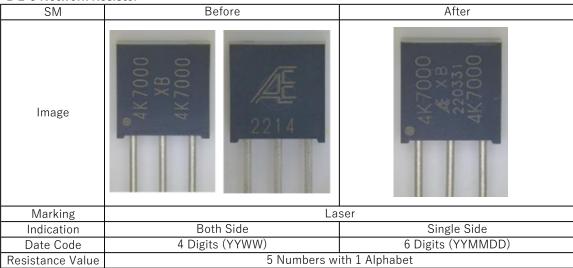


MD	Before	After
lmage	250R00 ÆYA 2214	250R00 Æ Y T 220329
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers with 1 Alphabet	

T TOOISION TROSISCON	(Comminally Coated)	
FLA	Before	After
Image	10K0 XA	80K000 A X F 222323
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	10K0 X A	80K000 A X 5 220328
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	10K000 Y B	80K000 220328
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



SLD1	Before	After
Image	10K0 X B	10K00
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	ÆH 10K0 10K0	TOKOO TOKOO
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 5/9

SE	Before	After
Image	004C00K00 X F	0080 (0080 # XB 72842
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 N	umbers with 1 Alphabet

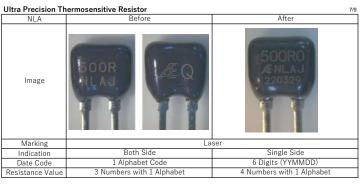
SF	Before	After
lmage	002B10K00 X B	DB4ABKOOD A X B 230020
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 Nu	mbers with 1 Alphabet

SS	Before	After
Image	002B10K00 X B	004A8K000 & x B 220328
Marking	Ink	Laser
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 Nu	imbers with 1 Alphabet

SC	Before	After
lmage	306F49K50 Æ XD 2214	306F49K50 -Æ XD 220401
Marking	L	aser
Indication	Sing	gle Side
Date Code	3 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	Circuit Number + 4 N	lumbers with 1 Alphabet

I ICCISION TINNI I III	ii Resistor (Comminanty Coateu)	0/9
TLA	Before	After
Image	1MOO CD	1M0000 A X B 220329
Marking		ser
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	10M000 X Q	10M000 220529
Marking	Laser	
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	5 Numbers w	th 1 Alphabet





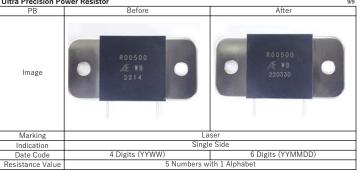
CLA	Before	After
lmage	30RO CLAD	30R00 & CLAD 220329
Marking		ser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet

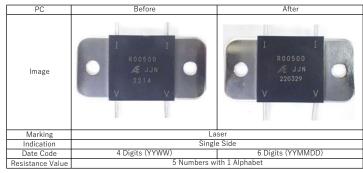
CLB	Before	After
Image	28RO ÆQ	30R00 & CLBD 220329
Marking		ser
Indication	Both Side	Single Side
Date Code	1 Alphabet Code	6 Digits (YYMMDD)
Resistance Value	3 Numbers with 1 Alphabet	4 Numbers with 1 Alphabet

KLC	Before	After
lmage	820R0 0858F 203	820R0 0888F Æ 220329
Marking	Las	
Indication	Both Side	Single Side
Date Code	3 Digits Code	6 Digits (YYMMDD)
Resistance Value	4 Numbers wit	h 1 Alphabet

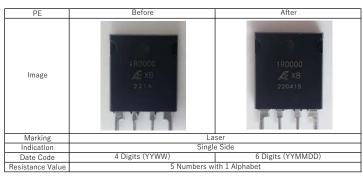
	sistor (Herrifetically Sealed)	0/9
HC, HD, HK, HL	Before	After
Image	1K0000 Æ YV 2214	1K0000 ÆYV 220401
Marking		aser
Indication		gle Side
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers v	with 1 Alphabet

HG	Before	After
Image	1R0000 EY 0 2215	1R0000 EY Q 220408 1 V V I
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	5 Numbers wi	th 1 Alphabet





PD	Before	After	
Image	20000 AE WJ	R50000 AE WJ 220329	
Marking		Laser	
Indication		e Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)	
Resistance Value	5 Numbers w	ith 1 Alphabet	



PSB	Before	After
lmage	Alpha Electronics Corp. PSB X R1000 B 2215	Alpha Electronics Corp. PSB X R1000 B 220407
Marking	Laser	
Indication	Single Side	
Date Code	4 Digits (YYWW)	6 Digits (YYMMDD)
Resistance Value	4 Numbers with 1 Alphabet	