

Eco-Products “GeoCap”

Nichicon promotes environmentally conscious practices.

Nichicon offers “GeoCap”, which has completely lead free terminals and contains no polyvinyl chloride in the sleeve.

■ Conductive Polymer Aluminum Solid Electrolytic Capacitors

Type・Classification	Type・Series	Lead-Free Compliance	Anti Polyvinyl Chloride Compliance	Page
Surface Mount type	PCF*, PCJ, PCK*, PCG, PCS*, PCL, PCW, PCV*, PCX*, PCR, PCA, PCM, PCH, PCZ	Complied	Complied	40 ~
Radial Lead type	PLF, PLG, PLS, PLX			WEB

■ Conductive Polymer Aluminum Solid Electrolytic Capacitors(FPCAP)

Type・Classification	Type・Series	Lead-Free Compliance	Anti Polyvinyl Chloride Compliance	Page
Surface Mount type	RPS*, RPA*, RHS*, RHA*, RSS*, RSA*, RSB*, RFS*, RFA*, RSL*, RDS, RKS	Complied	Complied	58 ~
Radial Lead type	RNS, RR7, RR5, RL8, RE5, RS8, RF8, RNU, RNE, RNL, RS6, RHT			WEB

■ Conductive Polymer Hybrid Aluminum Electrolytic Capacitors

Type・Classification	Type・Series	Lead-Free Compliance	Anti Polyvinyl Chloride Compliance	Page
Surface Mount type	GYA, GYB, GYC, GYD, GYE, GYF, GXC	Complied	Complied	74 ~

■ Aluminum Electrolytic Capacitors

Type・Classification	Type・Series	Lead-Free Compliance	Anti Polyvinyl Chloride Compliance	Page
Surface Mount type	UZG, UZT*, UCW, UCD, UCL, UCM, UCK, UCV, UUD, UWD, UCJ*, UCZ, UYA, UCH, UCX, UUJ, UUE*, UBC, UBH	Complied	Complied	90 ~
	UWP, UWT, UWZ, UWG, UUP, UUA, UUL, UUB, UWH, ULT, ULH, UUX, ULR, ULV, UUQ, UCQ, UUG, UUN			WEB
Radial Lead type	Standard type UVK*, UVR*, UVC*, UVE*, UVZ*, URS*, URZ, UVP*, UEP			129 ~
	High Reliability type UPM*, UPW, UPA*, UHV*, UHD*, UHE*, UHW, UPJ*, UPS*, UPV*, UPT, UTH, UPZ, UPH*, UCP, ULD, UCS, UCY, UBT, UBW, UBY, UXY, UBX			138 ~
	For special Circuits UAS			182
	For Audio Equipment UKA, UKT*, UKW*, UFW*, UES*			184 ~
Snap-in Terminal type	Standard type LLS, LLG			WEB
	High Reliability type LGJ*, LGN, LGG, LGL, LGM, LGJ*, LGJ ₍₁₅₎ *, LGY*, LGR, LGZ, LGX, LGC, LGW, LHT, LHX			187 ~
	For special circuits LAK*, LAQ*, LAS*, LAR*, LQS			208 ~
Screw Terminal type	LNR*, LNX*, LNK*, LNC, LQR*, LNY, LNT*, LNU*		Available upon request	210 ~
For Audio Equipment	LKX		Complied	WEB

Please refer to our website for the details of the series described as “WEB” or * mark

Corresponding to RoHS Directive

		Conductive Polymer Aluminum Solid Electrolytic Capacitors				Conductive Polymer Aluminum Solid Electrolytic Capacitors(FPCAP)		Conductive Polymer Hybrid Aluminum Electrolytic Capacitors
		SMD type (PCV, PCX, PCR, PCA, PCM, PCH, PCZ)	Lead wire terminal type (PLX)	SMD type (PCF, PCJ, PCK, PCG, PCS, PCL, PCW)	Lead wire terminal type (except PLX)	SMD type	Lead wire terminal type	SMD type
Corresponding to RoHS Directive		Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).						
Material	The portion of the components							
Lead (Pb)	Plating on terminals	Sn plating		Ag plating		Sn plating	Sn plating	Sn plating
	Insulating Sleeves	Does not contain				Does not contain		Does not contain
	Construction of terminals	Fe/Cu/Sn		Fe/Cu/Ag or Cu/Ag		Cu/Sn	Cu/Sn or Fe/Cu/Sn	Fe/Cu/Sn
	Resistance to soldering heat	Please refer to recommended conditions of soldering by reflow.	Correspondence to 265°C flow soldering condition	Please refer to recommended conditions of soldering by reflow.	Correspondence to 265°C flow soldering condition	Please refer to recommended conditions of soldering by reflow (FPCAP).	Correspondence to 260°C flow soldering condition	Please refer to recommended conditions of soldering by reflow.
	Solderability Tensile strength	No significant solderability difference between Sn-Ag-Cu and Sn-Pb solder.				No significant solderability difference between Sn-Ag-Cu and Sn-Pb solder.		No significant solderability difference between Sn-Ag-Cu and Sn-Pb solder.
Chromium (VI)	Plating material	Does not contain				Does not contain		Does not contain
Mercury		Does not contain				Does not contain		Does not contain
Cadmium								
PBB, PBDE								
DIBP, DBP, BBP, DEHP								
Identification for RoHS compliance parts		Add "Pb free" marking on outer carton label				Add "Pb free" marking on outer carton label		Add "Pb free" marking on inner and outer carton label
MSL (IPC/JEDEC J-STD-020)		Not Applicable				Not Applicable		Not Applicable

		Aluminum Electrolytic Capacitors			
		SMD type	Lead wire terminal type	Snap-in terminal type	Screw terminal type
Corresponding to RoHS Directive		Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).			
Material	The portion of the components				
Lead (Pb)	Plating on terminals	Change plating from Sn-Pb to Sn-Bi (< or=Dia.10mm) Change plating from Sn-Pb to Sn (> or=Dia.12.5mm) Change plating from Sn-Pb to Sn			Al
	Insulating Sleeves	No used			—
	Construction of terminals	Fe/Cu/Sn-1.5Bi (<or=Dia 10mm) Fe/Cu/Sn (>or=Dia 12.5mm)			Al
		Plating thickness 12μm Plating type matte No heat treatment after plating			—
	Resistance to soldering heat	Please refer to recommended conditions of soldering by reflow.			Not Applicable
	Solderability Tensile strength	No significant solderability difference between Sn-Ag-Cu and Sn-Pb solder.			—
Chromium (VI)	Plating material	Does not contain			Available (Chromium(VI) contained in the plating of fixtures)
Mercury	Identification for RoHS compliance parts	Does not contain			
Cadmium					
PBB, PBDE					
DIBP, DBP, BBP, DEHP					
MSL (IPC/JEDEC J-STD-020)		Part numbers are changed Add "Pb-free" marking on inner and outer carton label.	Part numbers are changed Add "Pb-free" and "PVCless" marking on inner and outer carton label.		Part numbers are changed Add "RoHS" marking on outer carton label.

Part Numbering for Pb-free Aluminum Electrolytic Capacitors

■ SMD type

Part Numbers for Pb-free SMD type capacitors represent as follows:

- (1) When certain part numbers are changed because of replacement with Pb-free plated terminals, their 11 digit shows the distinction.

(Example)

1 2 3 4 5 6 7 8 9 10 11 12 13 14
U ZS 1C 100 M CR 1GB (Sn-Pb plated terminals)

1 2 3 4 5 6 7 8 9 10 11 12 13 14
U ZS 1C 100 M CL 1GB (Pb-free plated terminals)

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RoHS compliant

Capacitance Tolerance TapingCode(Inclusive case diameter and packing spec)

Ⓛ will be put at 11 digit of numbering system

Exception : ※ **10th digit** of the part number also need to be changed for the following type-series and case size.
8X6.2 case size of UUX : **BR** to **CL**
※ UUE, UBC (Vibration Resistance) is only Pb-free and 11th digit the part number change to "S".
※ UCD is only Pb-free. In case of φ12.5 or more: 11th digit the part number change to "J".

■ Snap-in terminal type

(Example)

1 2 3 4 5 6 7 8 9 10 11 12
L GU 2D 681 M HL A (Sn-Pb plated terminals, PVC sleeve and bottom plate)

1 2 3 4 5 6 7 8 9 10 11 12
L GU 2D 681 M EL A (Pb-free plated terminals, PETsleeve and no bottom plate)

↓

RoHS compliant

Type Rated Voltage Series Code Rated Capacitance Configuration Case dia. code Capacitance Tolerance

ⓔ will be put at 10 digit of numbering system

■ Lead wire terminal type

Part Numbers for Pb-free type capacitors represent as follows:

- (1) When certain part numbers are changed because of replacement with Pb-free plated leadwire and PVC less, sleeves the **11th digit** of the part number represents the distinction.

(Example)

1 2 3 4 5 6 7 8 9 10 11
U VZ 1C 102 M PH (Sn-Pb plated leadwire,PVC sleeve)

1 2 3 4 5 6 7 8 9 10 11
U VZ 1C 102 M PD (Pb-free plated leadwire, PET sleeve)

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RoHS compliant

Type Rated Voltage Series Code Rated Capacitance Configuration Capacitance Tolerance

ⓓ will be put at 11 digit of numbering system

*Configuration code is subject to change by series of case diameter.

■ Screw terminal type

(Example)

1 2 3 4 5 6 7 8 9 10 11 12
L NX 2W 221 M SM G Bracket, Screwbolt, Lock washer (Cr (VI) plating)

1 2 3 4 5 6 7 8 9 10 11 12
L NX 2W 221 M SE G Cr (III) plating

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RoHS compliant

Type Rated Voltage Series Code Rated Capacitance Configuration Case dia. code Capacitance Tolerance

ⓔ will be put at 11 digit of numbering system

Information about "China RoHS 2"

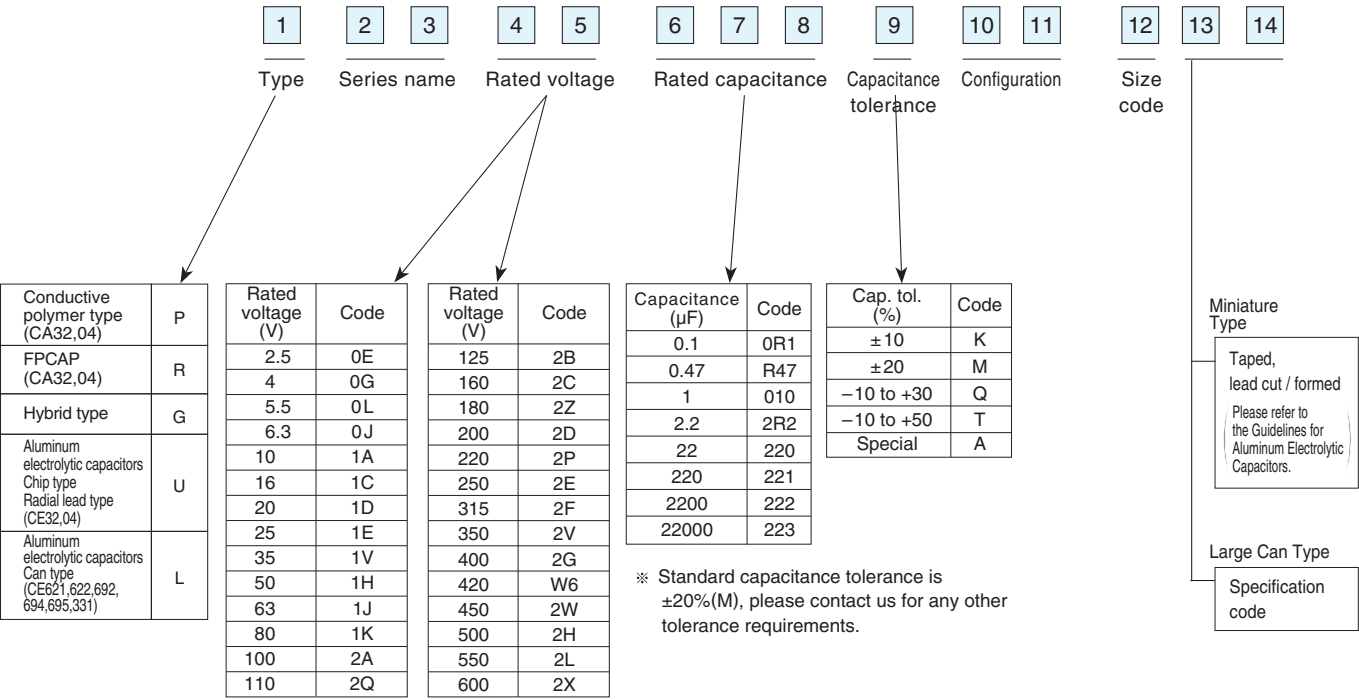
CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS, CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS
ALUMINUM ELECTROLYTIC CAPACITORS



Type	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (CrVI)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
P, R, G, U, L	○	○	○	○	○	○

This table is prepared in accordance with the provision of SJ/T 11364.
 ○ : the amount of the hazardous substance indicated inside the homogeneous materials used for this part is below the limit requirement of GB/T 26572
 × : the amount of the hazardous substance indicated inside at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572

Type numbering system ※ 1



※ 1 Please contact us about the FPCAP part number.

Product type and series names are listed on the top left of the individual specification pages.

※ Standard capacitance tolerance is ±20%(M), please contact us for any other tolerance requirements.