

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, PCV, PCX*, PCR, PCM, PCH, PCZ	Complied	Complied	40 ~
Radial Lead type	PLF, PLE, PLG, PLS, PLV, 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*	Complied	Complied	60 ~
Radial Lead type	RNS*, RR7*, RR5*, RL8, RE5*, RS8, RF8*, RNU, RNE, RNL, RS6, RHT			68 ~

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	Complied	Complied	86 ~

Aluminum Electrolytic Capacitors

Type · Classification	Type · Series	Lead-Free Compliance	Anti Polyvinyl Chloride Compliance	Page	
Surface Mount type	UZG, UZT, UCW, UCD, UCL, UCM, UCV, UUD, UWD, UCJ, UCZ, UYA, UCH, UCX, UJJ, UUE, UBC, UBH	Complied	Complied	99 ~	
	UZR, UZS, UWX, UWR, UWJ, UWP, UWT, UWZ, UWF, UWG, UUP, UUT, UUA, UUL, UCB, UUB, UWH, ULT, ULH, UUR, UUX, ULR, ULV, UUQ, UCQ, UUG, UUN			WEB	
Radial Lead type	Standard type			UVK*, UVR, UVC*, UVY, UVZ*, URS*, URZ, UVP*, UEP	142 ~
	High Reliability type			UPM*, UPW, UPA*, UHV, UHD*, UHE*, UHW, UPJ*, UPS, UPV*, UPT, UPZ, UPH, UCP, ULD, UCA*, UCS, UCY, UBT, UBW, UBY, UXY, UBX	160 ~
	For special Circuits			UKL*, UAQ*, UAS	219 ~
	For Audio Equipment			UKA, UKZ, UFG*, UKT*, UKW*, UFW*, UES*, UDB*	221 ~
Snap-in Terminal type	Standard type			LLS, LLG	226 ~
	High Reliability type			LGU, LGN, LGG, LGL, LGM, LGJ, LGJ ⁽¹⁵⁾ , LGY, LGR, LGZ, LGX, LGC, LGW, LHT	234 ~
	For special circuits			LAK*, LAQ*, LAS*, LAR*, LQS	266 ~
Screw Terminal type	LNR, LNX, LNK*, LNC, LQR*, LNY, LNT, LNU				Available upon request
For Audio Equipment	LKG, LKS, 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, PCM, PCH, PCZ)	Lead wire terminal type (PLV, PLX)	SMD type (PCF, PCJ, PCK, PCG, PCS, PCL)	Lead wire terminal type (except PLV, 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 page 19 for the recommendation reflow condition.	Correspondence to 265°C flow soldering condition	Please refer to page 19 for the recommendation reflow condition.	Correspondence to 265°C flow soldering condition	Please refer to page 25 for the recommendation reflow condition(FPCAP).	Correspondence to 260°C flow soldering condition	Please refer to page 19 for the recommendation reflow condition.
	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-020D)		Not Applicable				Not Applicable		Not Applicable

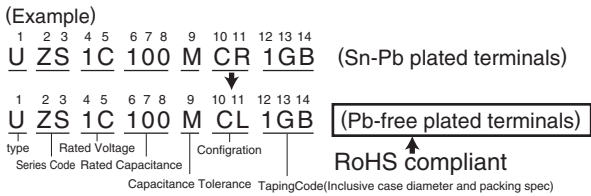
		Aluminum Electrolytic Capacitors				
		SMD type	Lead wire terminal type	Snap-in terminal type	Screw terminal type	
Corresponding to RoHS Directive		Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).				
Material	The portion of the components					
Lead (Pb)	Plating on terminals	(< or=Dia.10mm) Change plating from Sn-Pb toSn-Bi (> or=Dia.12.5mm) Change plating from Sn-Pb to Sn	Change plating from Sn-Pb to Sn		Al	
	Insulating Sleeves	No used		Replaced with PET		—
	Construction of terminals	Fe/Cu/Sn-1,5Bi (<or=Dia 10mm) Fe/Cu/Sn (>or=Dia 12.5mm)	Fe/Cu/Sn		Al	
			Cu/Sn (UKZ, UFG, UES, UDB)	Cu-Zn/Au (LKG type-III)		
		Plating thickness 12µm Plating type matte No heat treatment after plating	Plating thickness 10µm Plating type matte No heat treatment after plating		—	
Resistance to soldering heat	Please refer to page 19 for the recommendation reflow condition.	Correspondence to 260°C flow soldering condition		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		Does not contain				
Cadmium						
PBB, PBDE						
DIBP, DBP, BBP, DEHP						
Identification for RoHS compliance parts		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.	
MSL (IPC/JEDEC J-STD-020D)		Not Applicable				

Part Numbering for Pb-free Aluminum Electrolytic Capacitors

SMD type

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

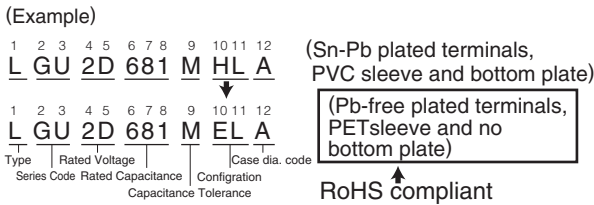
- (1) When certain part numbers are changed because of replacement with Pb-free plated terminals, their 11 digit shows the distinction.



L 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 UWF, UUX and UUR : **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

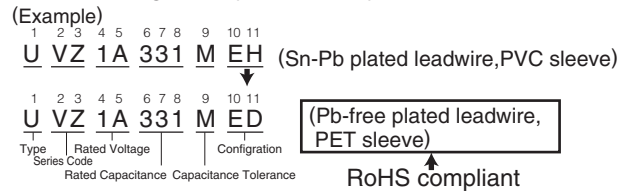


E will be put at 10 digit of numbering system

Lead wire terminal type

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

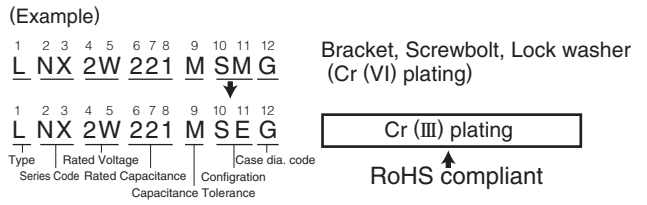
- (1) When certain part numbers are changed because of replacement with Pb-free plated leadwire and PVC less , sleeves the **11th digit** of the part number represents the distinction.



D will be put at 11 digit of numbering system

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

Screw terminal type



E 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