Corresponding to RoHS Directive

		C	onductive Poly Solid Electroly	ymer Aluminui ytic Capacitors	m s	Conductive Pol	Conductive Polymer Hybrid Aluminum Electrolytic Capacitors	
		SMD type (PCV, PCX, PCR)	Lead wire terminal type (PLV, PLX)	SMD type (except PCV,PCX,PCR)	Lead wire terminal type (except PLV, PLX)	SMD type	Lead wire terminal type	SMD type
Correspondir	ng to RoHS Directive		Com	plied		Complied		Complied
Material	The portion of the components							
	Plating on terminals	Sn pl	ating	Ag plating		Sn plating	Sn plating	Sn plating
	Insulating Sleeves	Does not contain				Does no	t contain	Does not contain
Lead (Pb)	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 sig	nificant solderabi Sn-Ag-Cu and		etween	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								
Cadmium		Does not contain				Does not contain		Does not contain
PBB		Does not contain				Boos not contain		Does not contain
PBDE								
Identification for RoHS compliance parts		Add "Pb free" marking on outer carton label			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

		SMD type	Lead wire terminal type	Snap-in terminal type	Screw terminal type			
Corresponding to RoHS Directive		Com	plied	Complied (Lug terminal type : Avallable)	Complied			
Material	The portion of the components							
	Plating on terminals	(< or=Dia.10mm) Change plating from Sn-Pb toSn-Bi	Change plating from Sn-Pb to Sn					
		(> or=Dia.12.5mm) Change plating from Sn-Pb to Sn	Change plating	170111 Sh-P0 to Sh	Al			
	Insulating Sleeves	No used	Replaced	d with PET	_			
Lead (Pb)	Construction of terminals	Fe/Cu/Sn-1.5Bi (<or=dia 10mm)<br="">Fe/Cu/Sn (>or=Dia 12.5mm)</or=dia>	Fe/C Cw/Sn (UKZ, UFG, UES, UDB)	Cu/Sn Cu-Zn/Au (LKG type-III)	Al			
		Plating thickn Plating type n treatment afte	natte No heat	Plating thickness 10 µm Plating type matte No heat treatment after plating	_			
	Resistance to soldering heat	Please refer to page 19 for the recommendation reflow condition.		ence to 260°C ring condition	Not Applicable			
	Solderability Tensile strength		No significant solderability difference between Sn-Ag-Cu and Sn-Pb solder.		_			
Chromium (VI)	Plating material		Available (Chromium(VI) contained in the plating of fixtures)					
Mercury								
Cadmium		Does not contain						
PBB								
PBDE			Part numbers are c					
Identification for RoHS compliance parts		Part numbers are changed Add "Pb-free" 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						

CAT.8100H

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)

2 3 4 5 6 7 8 9 10 11 12 13 14 <u>U ZS 1C 100 M CL 1GB</u> ype Rated Voltage Configration
Series Code Rated Capacitance type Rated Voltage

(Pb-free plated terminals) RoHS compliant

Capacitance Tolerance TapingCode(Inclusive case diameter and packing spec)

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". 11th digit the part number change to "Q".

Snap-in terminal type

(Example)

L GU 2D 681 M HL A 3 4 5 6 7 8 9 10 11 12 L GU 2D 681 M EL A Type Rated Voltage Case
Series Code Rated Capacitance Configration
Capacitance Tolerance Case dia, cod

(Sn-Pb plated terminals, PVC sleeve and bottom plate)

(Pb-free plated terminals, PETsleeve and no bottom plate)

RoHS compliant

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.

U VZ 1A 331 M EH (Sn-Pb plated leadwire,PVC sleeve) 2 3 4 5 6 7 8 9 10 11 <u>U VZ 1A 331 M ED</u> Type Rated Voltage Series Code Configration

(Pb-free plated leadwire, PET sleeve) RoHS compliant

D 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. 8X7 case size of USA, USR and USP CA to DD

8X7 case size of UST and USF CH to DD *Configuration code is subject to change by series of case diameter.

Screw terminal type

(Example)

L NX 2W 221 M SM G

Bracket, Screwbolt, Lock washer (Cr (VI) plating)

L NX 2W 221 M SE G Type Rated Voltage Series Code 5 Case dia. code

Cr (III) plating RoHS compliant

E will be put at 11 digit of numbering system

Corresponding to RoHS Directive

			Plastic Film Capacitors			
		Metallized plastic film capacitor QXK-(ZH), QXK, QXP, QXT, QXL, QAK, QAP	Plastic film capacitor for AC Power Based on Applications EEC, EEN, EXH	Foil type plastic film capacitor QYX		
Correspond	ding to RoHS Directive	Complied	Complied	Complied		
Material	The portion of the components					
	Plating on terminals	Sn plating	Sn plating	Sn plating		
	Internal connection, Internal soldering	Does not contain	Does not contain	Does not contain		
		Fe / Cu / Sn	Fe / Cu / Sn	Fe / Cu / Sn Plating thickness 12µm Plating type matte No heat treatment after plating		
Lead (Pb)	Construction of terminals	Plating thickness 12µm Plating type matte No heat treatment after plating	Plating thickness 3 to12µm Plating type matte No heat treatment after plating			
	Resistance to soldering heat	Correspondence to 260°c flow soldering condition	Correspondence to 260°c flow soldering condition	Correspondence to 260°c flow soldering 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)					
Mercury						
Cadmium		Does not contain	Does not contain	Does not contain		
PBB						
PBDE Identification for RoHS		A 1 1 11 11 11 11 11 11 11 11 11 11 11 1	A LL IIDL C III LI	A 1 1 11 11 11 1 1 1 1 1 1 1 1 1 1 1 1		
compliance		Add "Pb free" marking on inner and outer carton label	Add "Pb free" marking on inner and 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		

Information "China RoHS 2"

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS, CONDUCTIVE POLYMER HYBRID ALUMINUM ELECTROLYTIC CAPACITORS ALUMINUM ELECTROLYTIC CAPACITORS, ELECTRIC DOUBLE LAYER CAPACITORS, PLASTIC FILM CAPACITORS



Туре	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (CrVI)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)	
P, R, G, U, L, J, Q, E	0	0	0	0	0	0	
: the amount of the hazardous substance indicated inside the homogeneous materials used for this part is below the limit requirement of GB/T 26572-2011							
V: the amount of the hexardous substance indicated incide at least one of the homogeneous materials used for this part is above the limit requirement of CP/T 26572 2011							

POSITIVE THERMISTORS "Posi-R®"



Туре	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (CrVI)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
ZP	×	0	0	0	0	0

the amount of the hazardous substance indicated inside the homogeneous materials used for this part is below the limit requirement of GB/T 26572-2011

X: 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 26572-2011