

Lead-Free Family Summary Sheet-Resistor Components

Product Description		Pb Free 2nd-Level Interconnect Status										Soldering					RoHS Status					China Pollution Act Information (SJ/T11363-2006)					PCN-Status			
Technology/ Product Line	Product Family	Value/Div	Passive Qual. Complete and Report Available (QV)	Passive Samples available (SPT)	Pb/Free Manufacture (D/V)	Termination Finish	Underlayer	Lead of Base material	How to Order-Web (Lead Free)	Tin Lead (Sn/Pb) Information available (Pb/Free)	Minimum Solderability Level	IPU/IFRC-JSTD-020C compliant in 100% (D/0.1)	RoHS Qual. Complete and Report Available (QV)	RoHS-Compl. Sample (D/V)	RoHS-Compl. Mass Production (D/V)	Exemptions Used	China RoHS Compliant (YES/NO) 中国 RoHS (是否)	EPUP (YES/NO) 环保使用周期 (年)	Location of Hazardous Substance(s) 有害物质 所在材料	Pb 含量 X for Co-MCV 0 for Co-MCV 0.1 wts% (SJ/T11363-2006)	Hg 含量 X for Co-MCV 0 for Co-MCV 0.1 wts% (SJ/T11363-2006)	Cd 含量 X for Co-MCV 0 for Co-MCV 0.1 wts% (SJ/T11363-2006)	Cr(VI) 含量 X for Co-MCV 0 for Co-MCV 0.1 wts% (SJ/T11363-2006)	PBB 多溴联苯 X for Co-MCV 0 for Co-MCV 0.1 wts% (SJ/T11363-2006)	PBDE 多溴二噁英 X for Co-MCV 0 for Co-MCV 0.1 wts% (SJ/T11363-2006)	Product Change Notification Year / Part	Product Change Notification Date			
<b>Film Resistors-Metal</b>																														
Leaded Film	SFR25 / SFR25H / SFR16S	BC	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN/IND/01/2005	23 Mar 2004		
Leaded Film	NFR25 / NFR25H	BC	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN/IND/01/2006	23 Mar 2004		
Leaded Film	PR01 / PR02 / PR03	BC	✓	✓	✓	100% Sn	Ni	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN/IND/01/2007	23 Mar 2004		
Leaded Film	UXA... / UXB... / UXC...	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 410A/2004	23 Mar 2004		
Leaded Film	MPR...	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 410A/2004	23 Mar 2004		
Leaded Film	MBA... / MBB... / MBE... Prof	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA		
Leaded Film	CB8207	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA		
Leaded Film	MBA... / MBB... / MBE... Phac	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA		
Leaded Film	MBA204HF	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA		
Leaded Film	MRS16 / MRS25	BE	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA		
Leaded Film	DCF-55 / -47	BC/DR	✓	✓	✓	100% Sn	None	Cu	For Lead Free ordering code, please refer to the current data sheet	TBD	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	SMA0309, SMA0411, SMA0411HF	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	SMA0204, SMA0204HF, SMA0207, SMA0207HF	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	OMA0204, OMA0207, HMA0207, ZMA0411	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	MK4, MK5, MK8	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	PKA0207	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	NMA0207, NMA0411, NK4, NK5	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	NMA0207S, NMA0309S, NMA0411S	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	SKA0411, SKA0617, SKA0922, SKA0933	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	LCA0204, LCA0207, LCA0411, LCA0617, LCA0922, LCA0933	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	LCA0207S, LCA0411S, LCA0617S	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
Leaded Film	WK2, WK4, WK5, WR4, WR5	DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004		
MELF	MMU, MMA, MMB...	BE	✓	✓	✓	100% Sn	Ni, Cu, NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA		
MELF	MM0204 / OMM0204	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
MELF	PM0204	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
MELF	MM0207 / OMM0207	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
MELF	PM0207	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
MELF	LCM0207	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
MELF	MM0102 / OMM0102	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
MELF	LCM0207 S/ NMM0207 S	DR	✓	✓	✓	100% Sn	NIP	steel	Standard Part Number	NO	NA	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	PCN QW 0408	09 Mar 2003		
Leaded Metal Film	HVV	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	UT	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	MVV	DL	NA	NA	NA	No Plating	NA	Cu clad steel	<a href="#">New Package Code. Click for Link</a>	NO	1	✓	✓	NA	NA	NA	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	CCF2	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	CCF07	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	TBD	1	✓	✓	✓	✓	1/05	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004	
Leaded Metal Film	CCF50	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	408	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	CCF55	DL	✓	✓	✓	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	TBD	1	✓	✓	✓	✓	1/05	None	YES	NA		0	0	0	0	0	0	0	PCN 16 / 2004	23 Mar 2004	
Leaded Metal Film	CCF60	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	FRJ	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	CMF	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	PTF	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	CPF	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	✓	106	405	405	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
Leaded Metal Film	FP	DL	106	205	405	100% Sn matte	SnCu IMC	Cu	<a href="#">New Package Code. Click for Link</a>	YES	1	2601/03	UT	106	405	405	RoHS Annex 5 - Pb in glass	YES	NA		0	0	0	0	0	0	0	0	NA	NA
Angstrom Metal Film	Precision Metal Film, Hermetic Resistors	AN	NO	✓	✓	Au	Ni	Standard Part Number	Standard Part Number	YES	NO	NO	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	37990	
Angstrom Rheostats	Power Rheostats 12PXX	AN	NO	✓	✓	SnAg	Cu	Standard Part Number	Standard Part Number	YES	NO	NO	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	37990	
FIXED RESISTORS-FILM	RCMS/TE/YA/XXM ROP	SF	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	1	2602/03	✓	✓	✓	✓	None	YES	NA		0	0	0	0	0	0	0	NA	NA	
FIXED RESISTORS-FILM	RCMT 01	SF	404	404	404	100% Sn	None	Cu	Standard Part Number	NO	1	2602/03	✓	404	404	404	None	YES	NA		0	0	0	0	0	0	0	PCN Lead Free	3/04	
FIXED RESISTORS-FILM	NJ3N 4N 5	SF	404	404	404	100% Sn	None	Cu	Standard Part Number	NO	1	2602/03	✓	404	404	404	None	YES	NA		0	0	0	0	0	0	0	PCN Lead Free 05/07/		

Lead-Free Family Summary Sheet-Resistor Components

Product Description			Pb Free 2nd-Level Interconnect Status										Soldering				RoHS Status				China Pollution Act Information (BT11363-2006)								PCN-Status	
Technology/ Product Line	Product Family	Wafer Division	Prefer Qual. Complete and Report Available (Q7)	Prefer Sample available (S7)	Prefer Massproduction (D7)	Termination Finish	Underlayer	Lead or Base material	How to Order-Web (Lead Free)	Tin Lead (Sn/Pb) Information available after CO2-2011	Massure Solderability Level	IPU/IFPC-3STD-20C compliant in lead (D6a)	RoHS Qual. Complete and Report Available (Q7)	RoHS-Compl Sample (D7)	RoHS-Compl Massproduction (D7)	China RoHS Compliant (YES/NO) 符合 (符合/不符合)	EPUP (YEAR) 环保使用周期 (年)	Location of Hazardous Substance(s) 有害物质位置 所在位置	Pb 含量 X for Co-MCV 0.1 wts. (SJT11363-2006)	Hg 含量 X for Co-MCV 0.1 wts. (SJT11363-2006)	Cd 含量 X for Co-MCV 0.1 wts. (SJT11363-2006)	Cr(VI) 含量 X for Co-MCV 0.1 wts. (SJT11363-2006)	PBB 含量 X for Co-MCV 0.1 wts. (SJT11363-2006)	PBDE 含量 X for Co-MCV 0.1 wts. (SJT11363-2006)	Product Change Notification Year / Part No.	Product Change Notification Date				
Thin Film Chip R	MCS: (10R ... 100K) MCT: (3R3 ... 21K) MCV: (3R3 ... 480K) MCA: (10R ... 100K)	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of contacts	0	0	0	0	0	0	0	NA	NA			
Thin Film Chip R	MCT: (10R ... 100K) MCV: (3R3 ... 480K) MCA: (10R ... 100K)	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of R-layer, contacts and overglaze	X	0	0	0	0	0	0	NA	NA			
Thin Film Chip R	OCT: / OCU.	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of R-layer, contacts and overglaze	X	0	0	0	0	0	0	NA	NA			
Thin Film Chip R	NCT: / NCU.	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of R-layer, contacts and overglaze	X	0	0	0	0	0	0	NA	NA			
Thin Film Chip R	TCT: / TCU: / TCA.	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of R-layer, contacts and overglaze	X	0	0	0	0	0	0	NA	NA			
Thin Film Chip R	MCT...HF	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of contacts	0	0	0	0	0	0	0	NA	NA			
SMD-Fuse	MCT	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in glass fit of contacts and glaze	X	0	0	0	0	0	0	NA	NA			
Thin Film SMD	M.	DR	✓	✓	✓	100% Sn	NI	Ag	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	YES	NA	Pb in glass fit of contacts	0	0	0	0	0	0	0	PCN QW 0408/0407	09/08 Mar 2003		
Thin Film SMD	THPW.	DL	✓	✓	✓	100% Sn	NI	Ag	For Lead Free ordering code, please refer to the current data sheet	YES	NA	✓	✓	✓	✓	✓	YES	NA	Pb in glass fit of contacts	0	0	0	0	0	0	0	PCN QW 0408/0407	09/08 Mar 2003		
Thin Film Array	ACAC	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	YES	NA	Pb in glass fit of contacts	0	0	0	0	0	0	0	NA	NA		
Thin Film Array	ACAS	BE	✓	✓	✓	100% Sn	NI	AgPd, CuNi	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	YES	NA	Pb in glass fit of contacts	0	0	0	0	0	0	0	NA	NA		
SMD Thick Film	Industrial RCWP	DL	NA	305	405		NI	Cu and Ag on ceramic substrate	New Package Code- Click for Link	YES	1	✓	✓	✓	✓	✓	NA	50	Pb in Thick Film Glass	X	0	0	0	0	0	0	NA	NA		
Thin Film	Chip & Wire TLCC, LCC, HD	TF	305	305	405		Sn/Ag/Cu	NI	Cu	Custom Product	YES	NA	✓	✓	✓	✓	305	305	405	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Quick-Net	TF	305	305	405		Sn/Ag/Cu	NI	Cu	Custom Product	YES	NA	✓	✓	✓	✓	305	305	405	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Lead Frame Bond TSP	TF	305	305	405		Sn/Ag/Cu	NI	Cu	Custom Product	YES	NA	✓	✓	✓	✓	305	305	405	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Wire Chip/Lead Frame	TF	305	305	405		Sn/Ag/Cu	NI	Cu	Custom Product	YES	NA	✓	✓	✓	✓	305	305	405	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Molded Chip & Wire MP, MPD, DBN, TDP	TF	205	205	205		100% Sn matte	Cu	T termination	YES	1	✓	✓	✓	✓	✓	205	205	205	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Sliper Small Outlines OSOP	TF	205	205	205		100% Sn matte	Cu	T termination	YES	1	✓	✓	✓	✓	✓	205	205	205	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	CSD	TF	305	305	405		Sn/Ag/Cu	NI	Cu	Custom Product	YES	NA	✓	✓	✓	✓	305	305	405	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	20/30 MH Hybrid	TF	NA	NA	NA		NA	NA	NA	NO	NA	✓	✓	✓	✓	✓	NA	NA	NA	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Arrays	TF	NA	NA	NA		Au	NA	NA	NO	NA	✓	✓	✓	✓	✓	NA	NA	NA	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	VTF SPS	TF	305	305	405		Sn/Ag/Cu	NI	Cu	S Termination	YES	NA	✓	✓	✓	✓	305	305	405	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Thin Film Waparound Pns. PTN, Lns	TF	105	304	304		Sn/Ag/Cu	NI	NA	YES	NA	✓	✓	✓	✓	105	304	304	0	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Thin Film GPL Waparound 55342E, 55342H	TF	NA	NA	NA		NA	NA	NA	NO	NA	✓	✓	✓	✓	NA	NA	NA	0	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Thick Film Waparound M	TF	105	304	304		Sn/Ag/Cu	NI	NA	YES	NA	✓	✓	✓	✓	105	304	304	0	0	0	0	0	0	0	0	VTF-001-2005	104		
Thin Film	Resist Silicon Nets VSSR, VTSR, VSOR, VSSRC, VVR	TF	405	305	405		100% Sn matte	Cu	Date Code 0526	YES	1	✓	✓	✓	✓	405	305	405	0	0	0	0	0	0	0	0	VTF-001-2005	104		
Electro-Film	Hybrid Chips	EF	NA	✓	✓		Al or Au	NA	Standard Part number	NO	NA	✓	✓	✓	✓	✓	NA	NA	NA	0	0	0	0	0	0	0	0	VTF-001-2005	104	
Electro-Film	Hybrid Arrays	EF	NA	✓	✓		Al or Au	NA	Standard Part number	NO	NA	✓	✓	✓	✓	✓	NA	NA	NA	0	0	0	0	0	0	0	0	VTF-001-2005	104	
Electro-Film	Medical Components	EF	NA	NA	NA		NA	NA	NA	NO	NA	✓	✓	✓	✓	✓	NA	NA	NA	0	0	0	0	0	0	0	0	VTF-001-2005	104	
Thin Film	RMKD, CNP	SF	304	304	105		Au	NI	FEN	Standard Part number	NO	1	260/201	✓	✓	✓	404	404	105	0	0	0	0	0	0	0	0	PCN Lead Free 05/07/04	304	
Thin Film	CHP	SF	404	404	105		Sn/6.5Ag/3.5	NI	NA	Type termination N	YES	1	260/201	✓	✓	✓	404	404	105	0	0	0	0	0	0	0	0	PCN Lead Free 05/07/04	304	
Thin Film	P RV, CH, PRA, TFS, W, CNW	SF	404	404	105		Sn/6.5Ag/3.5	NI	NA	Type termination N	YES	1	260/201	✓	✓	✓	404	404	105	0	0	0	0	0	0	0	0	PCN Lead Free 05/07/04	304	
Thin Film	TAS, CNS, TFS, S	SF	404	404	105		Sn/6.5Ag/3.5	Cu	CuSn	Standard Part number	NO	1	260/201	✓	✓	✓	404	404	105	0	0	0	0	0	0	0	0	PCN Lead Free 05/07/04	304	
Thin Film	RMKS, ZM	SF	304	304	105		100% Sn	None	Cu/Fe	Standard Part number	NO	1	260/201	✓	✓	✓	404	404	105	0	0	0	0	0	0	0	0	PCN Lead Free 05/07/04	304	
Thin Film	TACS, RMK, SA, SB, RSK, CN	SF	✓	✓	✓		NA	NA	NA	NO	1	NA	NA	✓	✓	✓	✓	✓	✓	0	0	0	0	0	0	0	0	NA	NA	
<b>News</b>																														
Leaded Thick Film	RNX	DL	108	205	405		100% Sn matte	SnCu IMC	Cu	New Package Code- Click for Link	YES	1	260/103	UT	106	405	405	None	YES	NA	0	0	0	0	0	0	0	NA	NA	
Networks	SOMC	DL	306	404	206		95.5/3.9/0.6 SnCu/Ag	SnCu IMC	Cu alloy	New Package Code- Click for Link	YES	PT	260/201	✓	306	405	206	RoHS Annex 5 - Pb in glass and RoHS Annex 7a - high temp solder	NO	50	Solder and thick film materials	X	0	0	0	0	0	0	NA	NA
Networks	SOCC	DL	306	404	206		95.5/3.9/0.6 SnCu/Ag	SnCu IMC	Cu alloy	New Package Code- Click for Link	YES	PT	260/201	✓	306	405	206	RoHS Annex 5 - Pb in glass and RoHS Annex 7a - high temp solder	NO	50	Solder and thick film materials	X	0	0	0	0	0	0	NA	NA
Networks	MOP	DL	306	404	206		95.5/3.9/0.6 SnCu/Ag	SnCu IMC	Cu alloy	New Package Code- Click for Link	YES	PT	260/101	✓	306	405	206	RoHS Annex 5 - Pb in glass and RoHS Annex 7a - high temp solder	NO	50	Solder and thick film materials	X	0	0	0	0	0	0	NA	NA
Networks	MSP	DL	306	404	206		95.5/3.9/0.6 SnCu/Ag	SnCu IMC	Cu alloy	New Package Code- Click for Link	YES	PT	260/101	✓	306	405	206	RoHS Annex 5 - Pb in glass and RoHS Annex 7a - high temp solder	NO	50	Solder and thick film materials	X	0	0	0	0	0	0	NA	NA
Networks	CSC	DL	207	207	207		TBD	SnCu IMC	Steel	New Package Code- Click for Link	TBD	PT	260/101	✓	207	207	207	RoHS Annex 5 - Pb in glass and RoHS Annex 7a - high temp solder	NO	50	Solder and thick film materials	X	0	0	0	0	0	0	NA	NA
Networks	CZA	DL	0	0	0		100% Sn	NI	Ag	New Package Code- Click for Link	TBD	NA	0	0	0	0	0	Lead in glass of electronic components	NO	50	Pb in glass fit of R-layer, contacts and overglaze	X	0	0	0	0	0	0	PCN CRAD01/2003	01 May 2003
Networks	CRCA 10-50 pf	DL	406	404	206		100% Sn	NI	Ag/Cu	New Package Code- Click for Link	YES	PT	260/102	406	206	206	RoHS Annex 5 - Pb in glass	NO	50	Thick film materials, cadmium in high capacitor values	X	0	0	X	0	0	0	0	NA	NA
Networks	CRCA 51-200 pf	DL	406	404	206		100% Sn	NI	Ag/Cu	New Package Code- Click for Link	YES	PT	260/102	✓	406	206	206	RoHS Annex 5 - Pb in glass	NO	50	Thick film materials, cadmium in high capacitor values	X	0	X	0	0	0	0	NA	NA
Networks	CRCC 10-100 pf	DL	406	404	206		100% Sn	NI	Ag/Cu	New Package Code- Click for Link	YES	PT	260/103	✓	406	206	206	RoHS Annex 5 - Pb in glass	NO	50	Thick film materials, cadmium in high capacitor values	X	0	X	0	0	0	0	NA	NA
Networks	CRCC 101-200 pf	DL	406	404	206		100% Sn	NI	Ag/Cu	New Package Code- Click for Link	YES	PT	260/103	0	406	206	206	RoHS Annex 5 - Pb in glass	NO	50	Thick film materials, cadmium in high capacitor values	X	0	0	0	0	0	0	NA	NA
Networks	CS201	DL	406	404	206		95.5/3.9/0.6 SnCu/Ag	SnCu IMC	Cu alloy	New Package Code- Click for Link																				

Lead-Free Family Summary Sheet-Resistor Components

Product Description		Pb Free 2nd-Level Interconnect Status										Soldering				RoHS Status										China Pollution Act Information (SJ/T11363-2006)										PCN-Status	
Technology/ Product Line	Product Family	Plating Division	Plating Qual. Complete and Report Available (Q7)	Plating Sample available (Q7)	Plating/Reel/Manufacture (Q7)	Termination Finish	Underlayer	Layer of Base material	How to Order-Web (Lead Free)	Tin Lead (Sn/Pb) Confirmation available (Q7) (Lead Free)	Minimum Solderability Level	PLP/ULP/STP-20C compliant in 100% (Q7) (Lead Free)	RoHS Qual. Complete and Report Available (Q7)	RoHS-Compl. Sample (Q7)	RoHS-Compl. Mass Production (Q7)	Exemptions Used	China RoHS Compliant (YES/NO) 符合 (不符合)	EPUP (Y/N/A/B) 环保使用周期 (年)	Location of Hazardous Substance(s) 有害物质位置	Pb 含量 X for Co-McV O for Co-McV 0.1 wts. (SJ/T11363-2006)	Hg 含量 X for Co-McV O for Co-McV 0.1 wts. (SJ/T11363-2006)	Cd 含量 X for Co-McV O for Co-McV 0.1 wts. (SJ/T11363-2006)	Cr(VI) 含量 X for Co-McV O for Co-McV 0.1 wts. (SJ/T11363-2006)	PBB 含量 X for Co-McV O for Co-McV 0.1 wts. (SJ/T11363-2006)	PBDE 含量 X for Co-McV O for Co-McV 0.1 wts. (SJ/T11363-2006)	Product Change Notification No./ Date	Product Change Notification Date										
NTC-long flex leads	2322 645 90xxxx, 2322 645 10xxx, Ni wire	BC	✓	✓	✓	100% Sn	None	Ni	New Part Number 2381 645 1xxxx	NO	1	NA	✓	✓	✓	✓	Pb in contact paste glass frit		glass conductive layer	X	O	O	O	O	O												
NTC-SM	2322 640 3/4#...	BC	✓	✓	✓	100% Sn	None	Cu	New Part Number 2381 640 xxxxx from 11/04/2005	YES	1	✓	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O	VSD-4971-1063	38413									
NTC diodes glass encaps.	2322 633 5/9#.../900...	BC	✓	✓	✓	SnCu	None	Cu	New Part Number 2381 633 xxxxx	NO	1	✓	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer + glass envelope	X	O	O	O	O	O											
NTC high T isolated Ni wires	2322 645 9...	BC	✓	✓	✓	Ag	None	Ni	New Part Number 2381 645 9xxxx	YES	1	NA	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
NTC pvc isolated leads for refrigerator	2322 645 9... / 2322 641 9...	BC	✓	✓	✓	100% Sn	None	Cu	New Part Number 2381 645 9xxxx	NO	1	NA	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
NTC housings	2322 645 9...	BC	✓	✓	✓	100% Sn	None	Cu	New Part Number 2381 645 9xxxx	NO	1	NA	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
NTC pvc isolated leads others	2322 641 23/4	BC	✓	✓	✓	100% Sn	None	Cu	New Part Number 2381 641 xxxxx from 11/04/2005	NO	1	NA	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer + copper alloys	X	O	O	O	O	O											
NTC assemblies	2338 xxx	BC	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	1	NA	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
<b>Potentiometers</b>																																					
Potentiometers, Trimmer, attenuators etc	P10/P20/P40...etc.	DR	✓	✓	✓	Sn/AgCu	NA	div.	Standard Part Number	TBD	NA	✓	✓	✓	✓	✓	Pb in high melting temperature type solders	NO	50	Pb in high melting solder (internal connection)	X	O	O	O	O	O	PCN 16B / 2004	01 Mar 2004									
POTENTIOMETERS	P11	SF	✓	✓	✓	100% Sn	NA	Cu/NiSn	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
POTENTIOMETERS	148/149	SF	105	105	105	100% Sn	NA	Cu/NiSn	Standard Part number	NO	NA	260/40/3	✓	205	205	205	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
POTENTIOMETERS	P12/P13	SF	404	404	404	100% Sn	Ni	CuZn	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
POTENTIOMETERS	P16	SF	404	404	404	100% Sn	NA	CuZn	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
POTENTIOMETERS	PRV6	SF	404	404	404	100% Sn	Ni	CuZn	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
POTENTIOMETERS	PE30	SF	404	404	404	100% Sn	NA	CuSnP	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
POTENTIOMETERS	P9	SF	✓	✓	✓	100% Sn	Cu	CuSnP	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-LD-Multi Turns Trimmers	T6 / T63	SF	404	404	105	100% Sn	NA	Cu	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-LD-Single Turn Trimmers	T7	SF	404	404	105	Sn7/Ag3	NA	CuSnP	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-LD-Single Turn Trimmers	P8	SF	404	404	105	Sn7/Ag3	NA	CuSnP	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-LD-MultiTurns Trimmers	T9 / M64 / T93	SF	404	404	105	100% Sn	NA	Cu	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-LD-MultiTurns Trimmers	M43 / T16	SF	105	105	105	100% Sn	NA	Cu alloy	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-LD-Single Turn Trimmers	M63 / M70	SF	105	105	105	100% Sn	NA	Cu alloy	Standard Part number	NO	NA	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-SMD TRIMMERS	TSM4	SF	404	105	205	100% Sn	NA	CuSn	Standard Part number	NO	1	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-SMD TRIMMERS	TS54	SF	404	105	105	100% Sn	NA	CuSnP	Standard Part number	NO	4	260/40/3	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
TRIM-SMD TRIMMERS	TS63	SF	404	104	105	100% Sn	NA	Cu	Standard Part number	NO	UT	220/10/1	✓	205	105	105	Lead in glass and in Brass alloys Cd in electrical contacts	NO	50	Resistive element, shaft	X	O	X	O	O	O	PCN Lead Free 05/07/04	3/04									
<b>PTC</b>																																					
PTC-SMD Date	TFPT/PTFT	DL	✓	✓	✓	100% Sn	Ni	Cu	for T/R Package add: "V" for Bulk Package add: "F"	YES	1	✓	✓	✓	✓	✓	Pb in contact paste glass, and covering glass.	NO	50	Thin film element	X	O	O	O	O	O	010 2003	24-Dec-03									
PTC sensing leaded	2322 671 911...	BC	✓	✓	✓	100% Sn	None	Ni	New Part Number 2381 671 911 xxx from 11/04/2005	NO	1	✓	✓	✓	✓	✓	Pb in contact paste glass, and covering glass.	NO	50	Ceramic	X	O	O	O	O	O											
PTC-SMD direct	2322 675 ....	BC	✓	✓	✓	100% Sn	Ni	Ag	New Part Number 2381 675 xxxxx from 11/04/2005	NO	1	✓	✓	✓	✓	✓	Pb in contact paste glass, and covering glass.	NO	50	Ceramic + glass	X	O	O	O	O	O											
PTC-SMD Leadframe	2322 661 97... / 2322 673 ....	BC	NA	NA	NA	Pb2/Sn8	Ni	Bronze	New Part Number 2381 661 97xxx - 2381 673 xxxxx from 11/04/2005	NA	1	NO	✓	✓	✓	✓	Pb in electroceramics and HMP solder	NO	50	Ceramic + HMP solder	X	O	O	O	O	O											
PTC-Overload	2322 660.../661.../662.../663.../664...	BC	✓	✓	✓	100% Sn	Ni	Cu	New Part Number 2381 660 xxxxx from 11/04/2005	YES	1	✓	✓	✓	✓	✓	Pb in electroceramics and HMP solder	NO	50	Ceramic + HMP solder	X	O	O	O	O	O	PTC-2004-06	38278									
PTC-hot air	2322 660-661-662-663 90xxxx	BC	✓	✓	✓	100% Sn	Ni	Cu	New Part Number 2381 660 xxxxx	YES	1	✓	✓	✓	✓	✓	Pb in electroceramics and HMP solder	NO	50	Ceramic + HMP solder	X	O	O	O	O	O											
PTC-CER MotorStarts pellets		CR	NA	✓	✓	Ag	None	Ceramic	Standard Part Number	NO	1	NA	NA	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
PTC-CER MotorStarts housed		CR	NA	✓	✓	100% Sn	None	Steel	Standard Part Number	NO	1	NA	NA	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
PTC-CER Lighting	307 C xxxxx	CR	✓	✓	✓	100% Sn	Ni	Cu	New Part Number add "R"	YES	1	260/10/1	✓	✓	✓	✓	Pb in contact paste glass frit	NO	50	glass conductive layer	X	O	O	O	O	O											
<b>Transducers</b>																																					
TRANS-MOTION TRANSD.	FA 41-42-48	SF	204	304	404	Au/SnAg	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	YES	1	NA	NA	404	404	404	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
TRANS-MOTION TRANSD.	FA 43	SF	✓	✓	✓	Au	Ni	Cu alloy	Standard Part number	NO	1	NA	NA	205	205	205	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	NA	NA									
TRANS-MOTION TRANSD.	FA 44-47	SF	204	304	404	Sn7/Ag3	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	YES	1	NA	NA	205	205	205	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
TRANS-MOTION TRANSD.	FA 45	SF	204	304	404	Sn7/Ag3	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	YES	1	NA	NA	205	205	205	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
TRANS-MOTION TRANSD.	FA 46	SF	204	304	404	100% Sn	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	NO	1	NA	NA	205	205	205	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
TRANS-MOTION TRANSD.	FA 48	SF	✓	✓	✓	Au	Ni	Cu alloy	Standard Part number	NO	1	NA	NA	205	205	205	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	NA	NA									
TRANS-MOTION TRANSD.	FA 49	SF	204	304	404	100% Sn	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	NO	1	NA	NA	205	205	205	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	NA									
TRANS-MOTION TRANSD.	24/89	SF	404	105	105	Sn	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	YES	1	NA	NA	404	105	105	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	2/04									
TRANS-MOTION TRANSD.	357	SF	404	105	105	Au	Ni	Cu alloy	Standard Part Number-Remark"Lead Free"	NO	1	NA	NA	404	105	105	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	PCN Lead Free 05/07/04	28/02/04									
TRANS-MOTION TRANSD.	534	SF	✓	✓	✓	Au	Ni	Cu alloy	Standard Part number	NO	1	NA	NA	105	105	105	Pb in copper & Steel alloys Cadmium in wipers	NO	50	Pb in copper & Steel alloys Cadmium in wipers	X	O	X	O	O	O	NA	NA									
TRANS-MOTION TRANSD.	DIALS	SF	✓	✓	✓	NA	NA	NA	Standard Part number	NO																											

Lead-Free Family Summary Sheet-Resistor Components

Product Description		Pb Free 2nd-Level Interconnect Status				Soldering				RoHS Status				China Pollution Act Information (SJ/T11363-2006)						PCN-Status							
Technology / Product Line	Product Family	Value Division Available (OV)	Package Qual. Complete and Report Available (OV)	Package Samples available (S/T)	Package Mass Production (OV)	Termination Finish	Underlayer	Lead or Base material	How to Order-Web (Lead Free)	Tin Lead (Sn/Pb) Information available (OV) (Cu/Ag)	Minimum Solderability Level	IPU/IFPC-ASTD-20C compliant in an "O" time Pack (OV) (Cu/Ag)	RoHS Qual. Complete and Report Available (OV)	RoHS-Compliant Sample (OV)	RoHS-Compliant Mass Production (OV)	China RoHS Compliant (YES/NO) (是否环保)	EPUP (YEAR) (环保使用周期)	Location of Hazardous Substance(s) 有害物质位置	Pb 含量 X for Co-MCV 0.1 wts. (SJ/T11363-2006)	Hg 含量 X for Co-MCV 0.1 wts. (SJ/T11363-2006)	Cd 含量 X for Co-MCV 0.1 wts. (SJ/T11363-2006)	Cr(VI) 含量 X for Co-MCV 0.1 wts. (SJ/T11363-2006)	PBB 含量 X for Co-MCV 0.1 wts. (SJ/T11363-2006)	PBDE 含量 X for Co-MCV 0.1 wts. (SJ/T11363-2006)	PCN Change Notification Year / Part	PCN Change Notification Date	
Leaded WW	G207	DR	✓	✓	✓	Sn/Ag/Cu	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA	Pb in overglaze	X	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	GW5	DR	✓	✓	✓	Sn/Ag/Cu	None	Cu/AlMn	Standard Part Number	NA	NA	✓	NA	✓	✓	✓	NA	Pb in overglaze	X	0	0	0	0	0	0	NA	NA
Leaded WW	AC...	IC/DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	Z3...	IC/DR	✓	✓	✓	100% Sn	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	RW...	DR	✓	✓	✓	Sn/Ag/Cu	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	ZWO...	DR	✓	✓	✓	Sn/Ag/Cu	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	ZWS...	DR	✓	✓	✓	Sn/Ag/Cu	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	ZWK...	DR	✓	✓	✓	Sn/Ag/Cu	None	Cu	Standard Part Number	NO	NA	✓	✓	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	ZW...	DR	✓	✓	✓	No Plating	None	Cu/AlMn	Standard Part Number	NA	NA	✓	NA	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
Leaded WW	ZB...	DR	✓	✓	✓	No Plating	None	Cu/AlMn	Standard Part Number	NA	NA	✓	NA	✓	✓	✓	NA		0	0	0	0	0	0	0	PCN 16A / 2004	01 Mar 2004
WW-SMD	WSH2818	DL	305	105	405	100% Sn	NI	Cu		Yes	1	260/103	✓	305	105	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSH2816	DL	403	403	403	100% Sn	NI	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	403	403	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSR	DL	103	103	404	99% Sn/Ag	NA	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	103	103	305	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSL /WSK	DL	103	103	404	100% Sn	NI	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	103	103	305	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSC2515	DL	203	203	105	100% Sn Matte	NI	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	203	203	405	None	YES	50	X	0	0	0	0	0	NA	NA
WW-SMD	WSC4227	DL	203	203	404	100% Sn Matte	NA	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	203	203	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSC5927	DL	203	203	404	100% Sn Matte	NA	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	203	203	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSF2515	DL	203	203	105	100% Sn Matte	NI	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	203	203	405	None	NO	50	X	0	0	0	0	0	NA	NA
WW-SMD	WSF4227	DL	203	203	404	100% Sn Matte	NA	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	203	203	405	None	NO	50	X	0	0	0	0	0	NA	NA
WW-SMD	WSF212	DL	404	304	404	100% Sn Matte	NI	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	404	304	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSC12	DL	404	304	404	100% Sn Matte	NI	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	404	304	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSC1	DL	NA	NA	NA	100% Sn Matte	NA	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	NA	NA	NA	None	NO	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSC12	DL	NA	NA	NA	100% Sn Matte	NA	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	NA	NA	NA	None	NO	50	X	0	0	0	0	0	NA	NA
WW-SMD	WSE805	DL	406	206	406	10% Sn	NI	NiCu	<a href="#">New Package Code - Click for Link</a>	Yes	PT	PT	PT	406	206	406	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-SMD	WSL_E	DL	206	105	106	99.30.7 Sn/Cu	NA	NiCu	<a href="#">New Package Code - Click for Link</a>	Yes	1	✓	206	105	106	None	YES	NA	0	0	0	0	0	0	0	NA	NA
WW-LEADED	RS /NS	DL	305	205	205	100% Sn	NI	Cu clad steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	305	305	205	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CW	DL	305	205	205	100% Sn	NI	Cu clad steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	305	305	205	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	G	DL	305	205	205	100% Sn	NI	Cu clad steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	305	305	205	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CPSL	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CA	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CPL	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CPXC	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CPCP	DL	106	305	405	100% Sn	SnCu IMC	Cu clad Steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CPL	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CPW	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	CP	DL	106	305	405	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	305	405	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	LVR	DL	106	305	106	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	206	405	206	None	NO	50	X	0	0	0	0	0	NA	NA
WW-LEADED	CPR	DL	107	107	207	100% Sn	NI	Steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	107	107	207	None	NO	50	X	0	0	0	0	0	NA	NA
WW-LEADED	RH	DL	406	305	206	Ni/Pt/Au	NA	Cu clad steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	406	106	206	None	YES	NA	0	0	0	0	0	0	NA	NA
WW-LEADED	SR	DL	106	305	106	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	106	405	106	None	NO	50	X	0	0	0	0	0	NA	NA
WW-LEADED	HL	DL	107	107	107	100% Sn	NI	Cold Rolled Steel	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	107	107	107	None	NO	50	X	0	0	0	0	0	NA	NA
WW-LEADED	SPU	DL	107	107	107	100% Sn	SnCu IMC	Cu	<a href="#">New Package Code - Click for Link</a>	Yes	1	260/103	✓	107	107	107	None	NO	50	X	0	0	0	0	0	NA	NA
WW-LEADED	SPR	DL	TBD	TBD	TBD	customer specific	NA	Numerous	Contact Marketing	TBD	1	260/103	PT	TBD	TBD	TBD	RoHS Annex 7a - high temp solder	NO	50	X	0	0	0	0	0	NA	NA
WW-LEADED	ML Styles: RWR, RW, RER, RE, RLV30, RLV31	DL	NA	NA	NA	6040 Sn/Pb	NA	Cu Clad Steel	NA	Yes	1	NA	NA	NA	NA	NA	NA	Resistor Lead Plating	X	0	0	0	0	0	0	NA	NA
Ultrason Precision Wirewound		UL	NA	NA	NA	Sn/Pb	Cu	Cu	NA	NA	NO	✓	NA	NA	NA	NA	NA	Pb in enamel	NO	50	0	0	0	0	0	NA	NA
FIXED RESISTORS-WW	RWRWSTRARRSDRSRDAZ	SF	404	404	404	Stainless steel	NA	NA	Standard Part number	NO	1	NA	NA	NA	NA	NA	NA	Pb in glass	X	0	0	0	0	0	0	NA	NA
FIXED RESISTORS-WW	RT	SF	404	404	404	Sn/7Ag/3	None	Ni alloy	Standard Part number	NO	1	260/103	✓	404	404	206	None	NO	50	X	0	0	0	0	0	PCN Lead Free 3/04	3/04
FIXED RESISTORS-WW	RWM	SF	404	404	105	Sn99Cu0.7Ag0.3	Cu or Ni	Fe	add "E1"	NO	1	✓	404	404	105	None	NO	50	X	0	0	0	0	0	0	PCN Lead Free 05/07/04	3/04
FIXED RESISTORS-WW	RLR/RMB/RMS/BS/RH/SI	SF	404	404	404	Sn99Cu0.7Ag0.3	Cu	Fe	Standard Part number	NO	1	260/203	✓	404	404	205	None	YES	NA	0	0	0	0	0	0	PCN Lead Free 05/07/04	3/04
FIXED RESISTORS-WW	MSP	SF	404	4																							