ner Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS CorrespondenceExemp. Cd (Date of applicability)EL
7	BB-20-6CL0	878.294	Resonant Ceramic Elements	Ceramics	238.604	Lead titanium zirconium oxide (Pb(Ti,Zr)O3)	12626-81-2	94	X 7(c)-I(2016/07/20) C
						Misc.		6	
			Plate	Copper alloys	520.248	Copper	7440-50-8	65	
						Zinc	7440-66-6	35	
			Electrode	Glass	8.362	Silver (Ag)	7440-22-4	90	
						Silicone dioxide	7631-86-9	8.53	
						Nickel	7440-02-0	1	
						Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide; Lead monoxide; Lead monoxide (Lead oxide)	1317-36-8	0.47	X 7(c)-I(2016/07/20)
			Adhesive	Other thermoplastics	3.233	РАК		98	
						Silicon dioxide	7631-86-9	1	
						Coke	65996-77-2	1	
			Solder	Lead-free solder	28.83	Tin	7440-31-5	96.5	
						Silver (Ag)	7440-22-4	3	
						Copper	7440-50-8	0.5	
			Lead Wire Core	Copper (e.g. copper amount	42	Copper	7440-50-8	99.99	
						Misc.		0.01	
			Lead Wire Core Plating	Tin plating	4.05	Tin	7440-31-5	99.99	
						Misc.		0.01	
			Lead Wire Cover	PVC (Poly(vinyl chloride))	32.307	Polyvinyl chloride (PVC)	9002-86-2	99	
						Diantimony trioxide; Antimony trioxide	1309-64-4	1	
			Lead Wire Top Solder	Lead-free solder	0.66	Tin	7440-31-5	96.5	
								3	
						Copper	7440-50-8	0.5	
						Silver (Ag) Copper Signature :	7440-22-4 7440-50-8		> C ; RoHS Compliant, NG ; RoHS Not Co

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stomer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	EU-RoHS(C/NC
	BLM15HD102SN1D	1.21	Ceramic element	Ceramics	0.8413	Iron(III) oxide	1309-37-1	48			С
						Zinc oxide; C.I. 77947	1314-13-2	15			
						Nickel oxide	1313-99-1	23			
						Copper oxide; Copper (II) oxide	1317-38-0	10]
						Cobalt oxide (Co3O4)	1308-06-1	1]
						Manganese Oxide	1317-35-7	1			
						Bismuth oxide	1304-76-3	1]
						Misc		1]
			Outer electrode	Other special metals	0.0738	Silver (Ag)	7440-22-4	100]
				Glass	0.0082	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90]
			Inner electrode	Other special metals	0.241	Silver (Ag)	7440-22-4	100			
			Nickel Plating Layer	Nickel plating	0.023	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.0227	Tin	7440-31-5	100			

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	BLM15HG102SN1D	1.21	Outer electrode	Other special metals	0.0738	Silver (Ag)	7440-22-4	100			С
				Glass	0.0082	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Inner electrode	Other special metals	0.214	Silver (Ag)	7440-22-4	100			
			Nickel Plating Layer	Nickel plating	0.023	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.0227	Tin	7440-31-5	100			
			Ceramic element	Ceramics	0.8683	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	19			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Manganese Oxide	1317-35-7	1			
						Bismuth oxide	1304-76-3	1			

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	BLM18AG102SN1D	4.63	Outer electrode	Other special metals	0.2385	Silver (Ag)	7440-22-4	100			С
				Glass	0.0265	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Ceramic element	Ceramics	3.9669	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Bismuth oxide	1304-76-3	1			
			Inner electrode	Other special metals	0.29	Silver (Ag)	7440-22-4	100			
			Nickel Plating Layer	Nickel plating	0.0484	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.0597	Tin	7440-31-5	100			
						Signature : Name: Title: Company:	Lanney D. McHarg Corp. QA Manager Murata Americas				

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	BLM18AG121SN1D	4.63	Outer electrode	Other special metals	0.2385	Silver (Ag)	7440-22-4	100			С
				Glass	0.0265	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Ceramic element	Ceramics	3.9669	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Bismuth oxide	1304-76-3	1			
			Inner electrode	Other special metals	0.29	Silver (Ag)	7440-22-4	100			
			Nickel Plating Layer	Nickel plating	0.0484	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.0597	Tin	7440-31-5	100			
						Signature : Name: Title: Company:	Lanney D. McHar Corp. QA Manage Murata Americas	gue r			

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E	BLM18AG221SN1B	4.63	Outer electrode	Other special metals	0.2385	Silver (Ag)	7440-22-4	100			С
				Glass	0.0265	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Ceramic element	Ceramics	3.9669	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Bismuth oxide	1304-76-3	1			
			Inner electrode	Other special metals	0.29	Silver (Ag)	7440-22-4	100			
			Nickel Plating Layer	Nickel plating	0.0484	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.0597	Tin	7440-31-5	100			
						Signature : Name: Title: Company:	Lanney D. McHarg Corp. QA Manager Murata Americas	ue		ant, NG ; RoHS Not C	-

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	BLM18PG300SN1D	4.63	Outer electrode	Other special metals	0.2385	Silver (Ag)	7440-22-4	100			С
				Glass	0.0265	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Ceramic element	Ceramics	3.9669	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10]
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Bismuth oxide	1304-76-3	1			
			Inner electrode	Other special metals	0.29	Silver (Ag)	7440-22-4	100			1
			Nickel Plating Layer	Nickel plating	0.0484	Nickel	7440-02-0	100			1
			Tin Plating Layer	Tin plating	0.0597	Tin	7440-31-5	100			1
									> C ; RoHS Complia		-
						Signature :	Kan	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mat	tan gune	
						Name:	Lanney D. McHargu				
						Title:	Corp. QA Manager				
						Company:	Murata Americas	A / A 🔫 / A			

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	BLM31PG500SN1L	25.2	Outer electrode	Other special metals	1.917	Silver (Ag)	7440-22-4	100		C)
				Glass	0.213	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Ceramic element	Ceramics	20.602	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Bismuth oxide	1304-76-3	1			
			Inner electrode	Other special metals	2.1	Silver (Ag)	7440-22-4	100			
			Nickel Plating Layer	Nickel plating	0.165	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.203	Tin	7440-31-5	100			
						Signature : Name: Title: Company:	Lanney D. McHargu Corp. QA Manager Murata Americas	63		ant, NG ; RoHS Not Cor	

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BLM31PG601SN1L	25.2	Outer electrode	Other special metals	1.917	Silver (Ag)	7440-22-4	100			С
			Glass	0.213	diboron trioxide; boric oxide	1303-86-2	10			
					Silicon dioxide	7631-86-9	90			
		Ceramic element	Ceramics	20.602	Iron(III) oxide	1309-37-1	59			
					Zinc oxide; C.I. 77947	1314-13-2	20			
					Nickel oxide	1313-99-1	10			
					Copper oxide; Copper (II) oxide	1317-38-0	10			
					Bismuth oxide	1304-76-3	1			
		Inner electrode	Other special metals	2.1	Silver (Ag)	7440-22-4	100			
		Nickel Plating Layer	Nickel plating	0.165	Nickel	7440-02-0	100			1
		Tin Plating Layer	Tin plating	0.203	Tin	7440-31-5	100	> C ; RoHS_Compli		1

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Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	EU-RoHS(C/N
555C1H271JA01D	1.6	Outer electrode	Copper alloys	0.1818	Copper	7440-50-8	100			С
			Glass	0.0202	diboron trioxide; boric oxide	1303-86-2	20			
					Silicon dioxide	7631-86-9	80			
		Nickel Plating Layer	Nickel plating	0.019	Nickel	7440-02-0	100]
		Inner electrode	Nickel and Nickel alloys	0.295	Nickel	7440-02-0	100]
		Tin Plating Layer	Tin plating	0.05	Tin	7440-31-5	100			
		Ceramic element	Ceramics	1.034	Calcium oxide	1305-78-8	40]
					Zirconium oxide	1314-23-4	50]
					Misc		10			
							* EU-RoHS(C/NG) -	-> C ; RoHS Complia	ant, NG ; RoHS Not C	ompliant
55	5C1H271JA01D		Nickel Plating Layer Inner electrode Tin Plating Layer	Glass Nickel Plating Layer Nickel plating Inner electrode Nickel and Nickel alloys Tin Plating Layer	5C1H271JA01D 1.6 Outer electrode Copper alloys 0.1818 Glass 0.0202 Nickel Plating Layer Nickel plating 0.019 Inner electrode Nickel and Nickel alloys 0.295 Tin Plating Layer Tin plating 0.05	5C1H271JA01D 1.6 Outer electrode Copper alloys 0.1818 Copper 6 Glass 0.0202 diboron trioxide; boric oxide 6 Nickel Plating Layer Nickel plating 0.019 Nickel 7 Nickel Plating Layer Nickel and Nickel alloys 0.295 Nickel 7 Tin Plating Layer Tin plating 0.05 Tin 7 Ceramic element Ceramics 1.034 Calcium oxide 7 Outer electrode Nickel 1.034 Zirconium oxide	5C1H271JA01D1.6Outer electrodeCopper alloys0.1818CopperCopper7440-50-8Image: Solution of the state of t	SCIH271JA01D1.6Outer electrodeCopper alloys0.1818Copper7440-50-81001Glass0.0202diboron trioxide; boric oxide1303-86-22011Image: Science oxideSilicon dioxide7631-86-9801Nickel Plating LayerNickel plating0.019Nickel7440-02-01001Inner electrodeNickel and Nickel alloys0.295Nickel7440-02-01001Tin Plating LayerTin plating0.05Tin7440-03-51001Ceramic elementCeramics1.034Calcium oxide1305-78-8401Image: Science oxideImage: Science oxideImage: Science oxide1011Image: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxide1Image: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxide1Image: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxide1Image: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxide1Image: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxideImage: Science oxide1Image: Science oxideImage: Science oxideImage: Science oxide <td>SCH1271JA01D 1.6 Outer electrode Copper alloys 0.1818 Copper 7440-50-8 100 100 Image: All of the second second</td> <td>SC1H271 JA01D1.0Outer electrodeCopper alloys0.181.8Copper Alloys7440-50-8100Inter electrode501 H271 JA01D1.0Glass0.0202diboron trioxide; boric oxide1303-86-220Inter electrodeInter electrodeInter electrodeInter electrodeNickel plating0.019NickelNickel7440-02-0100Inter electrodeInter electrodeInter electrodeNickel and Nickel alloys0.295NickelNickel7440-02-0100Inter electrodeInter electrodeInter electrodeInter electrodeInter electrodeInter electrodeNickel and Nickel alloys0.05Tin Plating7440-31-5100Inter electrodeInter electrodeIn</td>	SCH1271JA01D 1.6 Outer electrode Copper alloys 0.1818 Copper 7440-50-8 100 100 Image: All of the second	SC1H271 JA01D1.0Outer electrodeCopper alloys0.181.8Copper Alloys7440-50-8100Inter electrode501 H271 JA01D1.0Glass0.0202diboron trioxide; boric oxide1303-86-220Inter electrodeInter electrodeInter electrodeInter electrodeNickel plating0.019NickelNickel7440-02-0100Inter electrodeInter electrodeInter electrodeNickel and Nickel alloys0.295NickelNickel7440-02-0100Inter electrodeInter electrodeInter electrodeInter electrodeInter electrodeInter electrodeNickel and Nickel alloys0.05Tin Plating7440-31-5100Inter electrodeInter electrodeIn

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	GRM1885C1H2R2CA01D	6.3	Outer electrode	Copper alloys	1.0539	Copper	7440-50-8	100			С
				Glass	0.1171	diboron trioxide; boric oxide	1303-86-2	20			
						Silicon dioxide	7631-86-9	80			
			Nickel Plating Layer	Nickel plating	0.047	Nickel	7440-02-0	100]
			Inner electrode	Nickel and Nickel alloys	0.726	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.129	Tin	7440-31-5	100]
			Ceramic element	Ceramics	4.227	Calcium oxide	1305-78-8	40]
						Zirconium oxide	1314-23-4	50]
						Misc		10			

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	GRM1885C1H560JA01D	6.3	Outer electrode	Copper alloys	1.0539	Copper	7440-50-8	100			С
				Glass		diboron trioxide; boric oxide	1303-86-2	20			
						Silicon dioxide	7631-86-9	80			
			Nickel Plating Layer	Nickel plating	0.047	Nickel	7440-02-0	100			
			Inner electrode	Nickel and Nickel alloys	0.726	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.129	Tin	7440-31-5	100			
			Ceramic element	Ceramics	4.227	Calcium oxide	1305-78-8	40			
						Zirconium oxide	1314-23-4	50			
						Misc		10			

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G	GRM2195C1H681JA01D	9.5	Outer electrode	Copper alloys	1.17	Copper	7440-50-8	100			С
				Glass	0.13	diboron trioxide; boric oxide	1303-86-2	20			
						Silicon dioxide	7631-86-9	80			
			Nickel Plating Layer	Nickel plating	0.053	Nickel	7440-02-0	100			
			Inner electrode	Nickel and Nickel alloys	2.149	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.145	Tin	7440-31-5	100			
			Ceramic element	Ceramics	5.853	Calcium oxide	1305-78-8	40			
						Zirconium oxide	1314-23-4	50			
						Misc		10			

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	GRM2195C2D470JV01D	9.5	Outer electrode	Other special metals	1.2447	Silver (Ag)	7440-22-4	100			С
				Glass	0.1383	diboron trioxide; boric oxide	1303-86-2	10			
						Silicon dioxide	7631-86-9	90			
			Inner electrode	Other special metals	2.658	Palladium	7440-05-3	90			
						Misc		10			
			Nickel Plating Layer	Nickel plating	0.048	Nickel	7440-02-0	100			1
			Ceramic element	Ceramics	5.28	Titanium dioxide	13463-67-7	30			1
						Neodymium oxide	1313-97-9	45			1
						Barium oxide, obtained by calcining witherite	1304-28-5	15			
						Misc		10			
			Tin Plating Layer	Tin plating	0.131	Tin	7440-31-5	100			1

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	GRM219R71E274KA01D	11	Ceramic element	Ceramics	7.001	Barium oxide, obtained by calcining witherite	1304-28-5	60			С
						Titanium dioxide	13463-67-7	30			
						Misc		10			
			Outer electrode	Copper alloys	1.2825	Copper	7440-50-8	100			
				Glass	0.1425	diboron trioxide; boric oxide	1303-86-2	20			
						Silicon dioxide	7631-86-9	80			
			Nickel Plating Layer	Nickel plating	0.058	Nickel	7440-02-0	100			
			Inner electrode	Nickel and Nickel alloys	2.357	Nickel	7440-02-0	100			
			Tin Plating Layer	Tin plating	0.159	Tin	7440-31-5	100			

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stomer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	Innovator in Electronics EU-RoHS(C/NG
	GRM21BR71C334KA01L	17	Ceramic element	Ceramics	11.904	Barium oxide, obtained by calcining witherite	1304-28-5	60			С
						Titanium dioxide	13463-67-7	30			
						Misc		10			
			Outer electrode	Copper alloys	1.9089	Copper	7440-50-8	100			
				Glass	0.2121	diboron trioxide; boric oxide	1303-86-2	20			
						Silicon dioxide	7631-86-9	80			l
			Nickel Plating Layer	Nickel plating	0.084	Nickel	7440-02-0	100			l
			Inner electrode	Nickel and Nickel alloys	2.66	Nickel	7440-02-0	100			l
			Tin Plating Layer	Tin plating	0.231	Tin	7440-31-5	100			Ī
							•	* EU-RoHS(C/NG)	> C ; RoHS Compli	ant, NG ; RoHS Not C	ompliant
						Signature :	Ra	62	mat	tangue	
						Name:	Lanney D. McHarg	ue			
						Title:	Corp. QA Manager				
						Company:	Murata Americas	A / A = / A =			

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	GRM31CR61C226KE15K	52	Ceramic element	Ceramics	43.267	Barium oxide, obtained by calcining witherite	1304-28-5	60			С
						Titanium dioxide	13463-67-7	30			
						Misc		10			
			Outer electrode	Copper alloys	3.9492	Copper	7440-50-8	100			
				Glass	0.4388	diboron trioxide; boric oxide	1303-86-2	20			
						Silicon dioxide	7631-86-9	80			
			Nickel Plating Layer	Nickel plating	0.173	Nickel	7440-02-0	100			
			Inner electrode	Nickel and Nickel alloys	3.698	Nickel	7440-02-0	100]
			Tin Plating Layer	Tin plating	0.474	Tin	7440-31-5	100]

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Lanney D. McHargue
Corp. QA Manager
Murata Americas
4/17/15

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ustomer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	EU-RoHS(C/NC
	GRM32ER72A225KA35L	110	Ceramic element	Ceramics		Barium oxide, obtained by calcining witherite	1304-28-5	60			С
						Titanium dioxide	13463-67-7	30]
						Misc		10			
			Outer electrode	Copper alloys	7.0569	Copper	7440-50-8	100			
				Glass	0.7841	diboron trioxide; boric oxide	1303-86-2	20			
				LQH32CN1R0M3		Silicon dioxide	7631-86-9	80			
			Nickel Plating Layer		0.296	Nickel	7440-02-0	100			
			Inner electrode	N ^{3L}	8.034	Nickel	7440-02-0	100]
			Tin Plating Layer		0.808	Tin	7440-31-5	100]

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Lanney D. McHargue	
Corp. QA Manager	
Murata Americas	
4/17/15	

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omer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	Innorator in Electronics EU-RoHS(C/N
LG	QH32CN1R0M33L	59.6	Outer Electrode 1	Nickel and Nickel alloys	0.0444	Nickel	7440-02-0	93			С
						Misc		7			
			Outer Electrode 2	Nickel and Nickel alloys	0.0444	Nickel	7440-02-0	70			
						Copper	7440-50-8	30			
			Ceramic element	Ceramics	44.9812	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Misc		1			
			Magnet Wire	Copper (e.g. copper amounts	10.7016	Copper	7440-50-8	100			
			Magnet Wire Coating	PUR (Polyurethane)	0.2184	Polyuretane resin	68400-67-9	100			
			Solder	Lead-free solder	0.96	Tin	7440-31-5	95			
						Copper	7440-50-8	5			
			Coating Resin	EP (Epoxy resin)	2.65	Epoxy Resin	25068-38-6	70			
						Silica, vitreous	60676-86-0	25			
						Misc		5			

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Lanney D. McHargue		
Corp. QA Manager		
Murata Americas		
	4/17/15	

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ustomer Part No.	Murata Part No.	Weight (mg)) Component Part	Material Name	Weight of material in Component (ma)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	Innorator in Electronics EU-RoHS(C/NG
	LQH32CN4R7M23L	59.6	Outer Electrode 1	Nickel and Nickel alloys	0.0444	Nickel	7440-02-0	93			С
						Misc		7			4
			Outer Electrode 2	Nickel and Nickel alloys	0.0444	Nickel	7440-02-0	70			1
						Copper	7440-50-8	30			1
			Ceramic element	Ceramics	44.9812	Iron(III) oxide	1309-37-1	59			1
						Zinc oxide; C.I. 77947	1314-13-2	20			1
						Nickel oxide	1313-99-1	10			1
						Copper oxide; Copper (II) oxide	1317-38-0	10			1
						Misc		1			1
			Magnet Wire	Copper (e.g. copper amount		Copper	7440-50-8	100			1
			Magnet Wire Coating	PUR (Polyurethane)	0.2184	Polyuretane resin	68400-67-9	100			1
			Solder	Lead-free solder	0.96	Tin	7440-31-5	95			1
						Copper	7440-50-8	5			1
			Coating Resin	EP (Epoxy resin)	2.65	Epoxy Resin	25068-38-6	70			1
						Silica, vitreous	60676-86-0	25			1
						Misc		5			
						Signature :	Ran	* EU-RoHS(C/NG)	> C ; RoHS Compli		
						Name:	Lanney D. McHarg	gue			
						Title:	Corp. QA Manager				
						Company:	Murata Americas				

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ustomer Part No.	Murata Part No.	Weight (mg)		Material Name	Weight of material in Component (mg)		CAS No.	Weight % of RoHS substance in Material	Exemp. Cd (Date o applicability)	f EU-RoHS(C/N
	LQH43MN100K03L	128	Outer Electrode 1	Nickel and Nickel alloys	0.071	Nickel	7440-02-0	93		С
						Misc		7		_
			Outer Electrode 2	Nickel and Nickel alloys	0.071	Nickel	7440-02-0	70		_
						Copper	7440-50-8	30		_
			Ceramic element	Ceramics	98.178	Iron(III) oxide	1309-37-1	59		_
						Zinc oxide; C.I. 77947	1314-13-2	20		_
						Nickel oxide	1313-99-1	10		_
						Copper oxide; Copper (II) oxide	1317-38-0	10		_
						Misc		1		
			Magnet Wire	Copper (e.g. copper amount		Copper	7440-50-8	100		
			Magnet Wire Coating	PUR (Polyurethane)	0.518	Polyuretane resin	68400-67-9	100		
			Solder	Lead-free solder	2.6	Tin	7440-31-5	95		
						Copper	7440-50-8	5		
			Coating Resin	EP (Epoxy resin)	1.18	Epoxy Resin	25068-38-6	70		
						Silica, vitreous	60676-86-0	25		
						Misc		5		
						Signature : Name: Title:	Lanney D. McHargu Corp. QA Manager	* EU-RoHS(C/NG)> C ; RoHS Comp		

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stomer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	EU-RoHS(C/NC
	LQH43MN470K03L	128	Outer Electrode 1	Nickel and Nickel alloys	0.071	Nickel	7440-02-0	93			С
						Misc		7			
			Outer Electrode 2	Nickel and Nickel alloys	0.071	Nickel	7440-02-0	70]
						Copper	7440-50-8	30]
			Ceramic element	Ceramics	98.178	Iron(III) oxide	1309-37-1	59]
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10]
						Copper oxide; Copper (II) oxide	1317-38-0	10]
						Misc		1			
			Magnet Wire	Copper (e.g. copper amount	25.382	Copper	7440-50-8	100]
			Magnet Wire Coating	PUR (Polyurethane)	0.518	Polyuretane resin	68400-67-9	100]
			Solder	Lead-free solder	2.6	Tin	7440-31-5	95			
						Copper	7440-50-8	5]
			Coating Resin	EP (Epoxy resin)	1.18	Epoxy Resin	25068-38-6	70]
						Silica, vitreous	60676-86-0	25]
						Misc		5			

Signature : Name: Title: Company: Date (mm/dd/yy)

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stomer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	Innorator in Electronics EU-RoHS(C/NG)
L	QH43MN471K03L	128	Outer Electrode 1	Nickel and Nickel alloys	0.071	Nickel	7440-02-0	93			C
						Misc		7			1
			Outer Electrode 2	Nickel and Nickel alloys	0.071	Nickel	7440-02-0	70			1
						Copper	7440-50-8	30			1
			Ceramic element	Ceramics	98.178	Iron(III) oxide	1309-37-1	59			1
						Zinc oxide; C.I. 77947	1314-13-2	20			1
						Nickel oxide	1313-99-1	10			1
						Copper oxide; Copper (II) oxide	1317-38-0	10			1
						Misc		1			1
			Magnet Wire	Copper (e.g. copper amounts	25.382	Copper	7440-50-8	100			1
			Magnet Wire Coating	PUR (Polyurethane)	0.518	Polyuretane resin	68400-67-9	100			1
			Solder	Lead-free solder	2.6	Tin	7440-31-5	95			1
						Copper	7440-50-8	5			1
			Coating Resin	EP (Epoxy resin)	1.18	Epoxy Resin	25068-38-6	70			1
						Silica, vitreous	60676-86-0	25			1
						Misc		5			1

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Lanney D. McHargue Corp. QA Manager Murata Americas 4/17/15

To: IHS Technology Information & Insight Operations Composition Sheet

ustomer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	EU-RoHS(C/NG
	NFE61PT472C1H9L	61.7	Outer electrode of ends	Nickel plating		Nickel	7440-02-0	100			NG
				Silver plating		Silver (Ag)	7440-22-4	100			
				highly alloyed steel	8.256	Nickel	7440-02-0	42]
						Fe	1309-37-1	55			
						Mn	7439-96-5	1			
						Cobalt and its compounds; Cobalt, elemental	7440-48-4	1			
						Misc		1]
			Ceramic element 1	Ceramics	21.92	Titanium dioxide	13463-67-7	45			
						Strontium Oxide	1314-11-0	45			
						Calcium oxide	1305-78-8	7			
						Lead(II) oxide; Lead oxide (PbO); C.I. Pigment Yellow 46; Lead monoxide; Lead(2+) oxide; Lead monoxide; Lead monoxide (Lead oxide)	1317-36-8	1	Х	No exemption	
						Bismuth oxide	1304-76-3	1			
						Misc		1			
			Nickel Plating Layer	Nickel plating	0.22	Nickel	7440-02-0	95			
						Phosphorus	7723-14-0	5			
			Ceramic element 2	Ceramics	19.7	Iron(III) oxide	1309-37-1	59			
						Zinc oxide; C.I. 77947	1314-13-2	20			
						Nickel oxide	1313-99-1	10			
						Copper oxide; Copper (II) oxide	1317-38-0	10			
						Cobalt oxide (Co3O4)	1308-06-1	1			
			Tin Plating Layer	Tin plating	1.46	Tin	7440-31-5	100			
			Inner electrode	Copper alloys	9.8	Copper	7440-50-8	92			
						Tin	7440-31-5	8			
						Signature : Name:	Lanney D. McHa	rgue		ant, NG ; RoHS Not C	
						Title:	Corp. QA Manag	er			
						Company	Murata Americas				

Company: Date (mm/dd/yy)

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The following products are certified to be in compliance with the RoHS (DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 04

Customer Part No.	Murata Part No.	Weight (mg)	Component Part	Material Name	Weight of material in Component (mg)	Sub
	TZB4Z100BB10R00 1	152.4676	Rotor	Copper alloys	43.016	Сорр
						Zinc
			Roter Terminal	Copper alloys	17.0524	Copp
						Zinc
				Nickel plating	0.0188	Nicke
				Tin plating	0.1705	Tin
			Driver Plate	highly alloyed steel	7.0224	Iron
						Chro
						Nicke
			Spring	Copper alloys	2.1135	Copp
						Tin
				Tin plating	0.8961	Tin
			Lubricants	Lubricants,Brake fluid, etc	0.1388	Silico
			Case	UP (Unsaturated polyester)	48.3451	Polye
			Stator	Ceramics	13.0051	Cera
			Electrode	Other special metals	0.9789	Silve
						Palla
			Sator terminal	Copper alloys	12.5784	Copp
						Zinc
				Nickel plating	0.0138	Nicke
				Tin plating	0.1258	Tin
			Cover film	Other film coating of inorganic compounds	6.992	Silico

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Substance Name	CAS No.	Weight % of substance in Material	RoHS Correspondence	Exemp. Cd (Date of applicability)	EU-RoHS(C/NG)*
Copper	7440-50-8	68.1			С
Zinc	7440-66-6	31.9			
Copper	7440-50-8	68.1			
Zinc	7440-66-6	31.9			
Nickel	7440-02-0	100			
Tin	7440-31-5	100			
Iron	7439-89-6	69.5			
Chromium	7440-47-3	20			
Nickel	7440-02-0	10.5			
Copper	7440-50-8	91			
Tin	7440-31-5	9			
Tin	7440-31-5	100			
Silicone Oil	63148-62-9	100			
Polyester resin	68604-67-1	100			
Ceramic	13463-67-7	100			
Silver (Ag)	7440-22-4	87			
Palladium	7440-05-3	13			
Copper	7440-50-8	68.1			
Zinc	7440-66-6	31.9			
Nickel	7440-02-0	100			
Tin	7440-31-5	100			
Silicone rubber		100			
				ant, NG ; RoHS Not C	ompliant
Signature :	Fan	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mak	tangue	
Name:	Lanney D. McHargue)			
Title:	Corp. QA Manager				
Company:	Murata Americas				
Date (mm/dd/yy)		4/17/15			