


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	W103*BR12SH3	B	MU1A	2014-03-12
Amount	UoM	Unit type	ST ECOPACK Grade	
3515	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Gold (Ni/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
	21 x 14 x 6 mm	4	pin	
Comment	SNAPHAT			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description
6c	Copper alloy containing up to 4 % lead by weight

QueryList : REACH-16th December 2013				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				false
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Nonyphenol	1000 ppm	35.753	in polymerized encapsulation resin	10172
1,2 Dimethoxyethane	1000 ppm	36.614	in Lithium Battery	10417

Material Composition Declaration						Mfr Item Name	W103*BR12SH3					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Base	Other inorganic materials	554.900	mg	supplier	base	Glass	65997-17-3		83.235	mg	150000	23680
Base				supplier	base	Liquid Crystal Polymer	70679-92-4		443.920	mg	800000	126293
Base				supplier	base	Antimony Trioxide	1309-64-4		27.745	mg	50000	7893
Housing	Other Organic Materials	616.228	mg	supplier	Housing	Poly(butylene terephthalate)	30965-26-5		436.790	mg	708812	124264
Housing				supplier	Housing	glass	65997-17-3		137.619	mg	223325	39152
Housing				supplier	Housing	Antimony trioxide	1309-64-4		17.886	mg	29024	5088
Housing				supplier	Housing	Tetrahydrofuran	109-99-9		2.992	mg	4855	851
Housing				supplier	Housing	Carbon black	1333-86-4		2.992	mg	4855	851
Housing				supplier	Housing	Brominated flame retardant	Proprietary		17.951	mg	29130	5107
Connection pins	Copper & its alloys	166.990	mg	supplier	Pins	Copper (Cu)	7440-50-8		93.181	mg	558003	26510
Connection pins				supplier	Pins	Zinc (Zn)	7440-66-6		65.393	mg	391598	18604
Connection pins				R	Pins	Lead (Pb)	7439-92-1	6c. Lead as an alloy	4.910	mg	29403	1397
Connection pins	Nickel (Ni)			supplier	Pins	Nickel (Ni)	7440-02-0		2.605	mg	15600	741
Connection pins	Precious metals			supplier	Pins	Gold (Au)	7440-57-5		0.901	mg	5396	256
Encapsulation	Other Organic Materials	1191.752	mg	supplier	Encapsulation	Bis F Epoxy Resin	54208-63-8		679.298	mg	569999	193257
Encapsulation				supplier	Encapsulation	Epoxyde Bisphenol A Resin	25068-38-6		45.287	mg	38000	12884
Encapsulation				supplier	Encapsulation	Carbon Black	1333-86-4		2.384	mg	2000	678
Encapsulation				supplier	Encapsulation	Calcium carbonate	1317-65-3		47.670	mg	40000	13562
Encapsulation				supplier	Encapsulation	Triethyl phosphate	78-40-0		23.835	mg	20000	6781
Encapsulation				supplier	Encapsulation	metal hydroxide	21645-51-2		23.835	mg	20000	6781
Encapsulation				supplier	Encapsulation	Kaolin	1332-58-7		47.670	mg	40000	13562
Encapsulation				SVHC	Encapsulation	Nonyl-Phenol	84852-15-3		35.753	mg	30000	10172
Encapsulation				supplier	Encapsulation	Polyoxypropylenediamine	9046-10-0		286.020	mg	240000	81371
Battery & tabs	Copper & its alloys	843.000	mg	supplier	metal casing and tabs	Iron (Fe)	7439-89-6		434.828	mg	515810	123706
Battery & tabs				supplier	metal casing and tabs	Chromium (Cr)	7440-47-3		104.967	mg	124516	29863
Battery & tabs				supplier	metal casing and tabs	Nickel (Ni)	7440-02-0		47.561	mg	56419	13531
Battery & tabs				supplier	metal casing and tabs	Molybdenum (Mo)	7439-98-7		5.132	mg	6088	1460
Battery & tabs				supplier	metal casing and tabs	Manganese (Mn)	7439-96-5		2.053	mg	2435	584
Battery & tabs	Other inorganic materials			supplier	electrolyte	Carbon Monofluoride	51311-17-2		98.112	mg	116384	27912
Battery & tabs				supplier	electrolyte	Propylene Carbonate	108-32-7		67.144	mg	79649	19102
Battery & tabs				supplier	electrolyte	Polypropylene	9003-07-0		26.419	mg	31339	7516
Battery & tabs				SVHC	electrolyte	Dimethoxythane	110-71-4		36.614	mg	43433	10417
Battery & tabs				supplier	electrolyte	Lithium	7439-93-2		20.170	mg	23926	5738
Oscillator	Stainless steel	142.130	mg	supplier	metal electrode shelf & wires	Iron (Fe)	7439-89-6		19.080	mg	17.735	134243
Oscillator				supplier	metal electrode shelf & wires	Nickel (Ni)	7440-02-0		33.556	31.19	236094	9547
Oscillator				supplier	metal electrode shelf & wires	Cobalt (Co)	7440-48-4		3.291	3.059	23155	936
Oscillator				supplier	metal electrode shelf & wires	Copper (Cu)	7440-50-8		58.028	53.937	408274	16509
Oscillator				supplier	metal electrode shelf & wires	Chromium (Cr)	7440-47-3		0.069	0.064	485	20
Oscillator				supplier	metal electrode shelf & wires	Molybdenum (Mo)	7439-98-7		0.037	0.034	260	11
Oscillator				supplier	metal electrode shelf & wires	Silver (Ag)	7440-22-4		0.031	0.029	218	9
Oscillator				supplier	metal electrode shelf & wires	Tin (Sn)	7440-31-5		1.769	1.644	12446	503
Oscillator				supplier	metal electrode shelf & wires	Zinc (Zn)	7440-66-6		15.640	14.537	110040	4450
Oscillator	Other inorganic materials			supplier	glass	Silicon dioxide	7631-86-9		3.276	mg	23049	932
Oscillator				supplier	glass	Aluminum oxide	1344-28-1		0.311	mg	2188	88
Oscillator				SVHC	glass	Diboron-trioxide	1303-86-2		1.231	mg	8661	350
Oscillator				supplier	glass	Barium oxide	1304-28-5		0.311	mg	2188	88
Oscillator				supplier	glass	Zinc Oxide	1314-13-2		0.018	mg	127	5
Oscillator				supplier	glass	Disodium-oxide	1313-59-3		0.311	mg	2188	88
Oscillator				supplier	glass	Dipotassium-oxide	12136-45-7		0.311	mg	2188	88
Oscillator				supplier	glass	Dilithium-oxide	12057-24-8		0.029	mg	204	8
Oscillator				supplier	glass	Diron-trioxide	1309-37-1		0.018	mg	127	5
Oscillator				supplier	glass	Chromium(III)oxide	1308-38-9		0.018	mg	127	5
Oscillator				supplier	glass	Fluorine	7782-41-4		0.029	mg	204	8
Oscillator				supplier	glass	Calcium compound	1305-78-8		0.066	mg	464	19
Oscillator				supplier	Quartz	Quartz	14808-60-7		4.700	mg	33068	1337