

# JO54H Series Material Declaration

Total Weight: 60.5 mg



RoHS compliant



Pb free



REACH compliant



Part	Weight of parts(mg)	Content substance			CAS No	Content (mg)	Content (wt%)
Crystal blank	2.0200	Quartz	Quartz	SiO <sub>2</sub>	14808-60-7	2.0200	3.3413
Electrode	0.0402	Au-Cr	Gold	Au	7440-57-5	0.0400	0.0662
			Chromium	Cr	7440-47-3	0.0002	0.0003
Conductive adhesive	0.0380	Silicon resin	Silicon	Si	7440-21-3	0.0040	0.0066
			Silver	Ag	7440-22-4	0.0340	0.0562
Base	49.3624	Ceramic	Aluminium oxide	Al <sub>2</sub> O <sub>3</sub>	1344-28-1	35.4500	58.6373
			Silicon dioxide	SiO <sub>2</sub>	7631-86-9	1.1300	1.8691
			Chromium oxide	Cr <sub>2</sub> O <sub>3</sub>	1308-38-9	0.1800	0.2977
			Molybdenum	Mo	7439-98-7	0.2400	0.3970
		Gold plate	Gold	Au	7440-57-5	1.1604	1.9194
		Ni	Nickel	Ni	7440-02-0	1.9400	3.2089
		Mo-W	Molybdenum	Mo	7439-98-7	0.0900	0.1489
			Tungsten	W	7440-33-7	2.7200	4.4991
		Kovar Ring	Iron	Fe	7439-89-6	3.4800	5.7562
			Nickel	Ni	7440-02-0	1.8700	3.0931
Cobalt	Co		7440-48-4	1.1020	1.8228		
IC	1.3952	Au Wire	Gold	Au	7440-57-5	1.0200	1.6872
		Si-Al	Silicon	Si	7440-21-3	0.3740	0.6186
			Aluminium	Al	7429-90-5	0.0012	0.0020
		PAD	Copper	Cu	7440-50-8	0.0002	0.0003
Metal Cap	7.6006	Kovar	Iron	Fe	7439-89-6	3.6700	6.0705
			Nickel	Ni	7440-02-0	1.9700	3.2585
			Cobalt	Co	7440-48-4	1.1600	1.9187
		Ag Filler	Nickel	Ni	7440-02-0	0.4000	0.6616
			Silver	Ag	7440-22-4	0.2900	0.4797
			Copper	Cu	7440-50-8	0.1100	0.1819
		Nickel plating	Nickel	Ni	7440-02-0	0.0003	0.0005
			Phosphorus	P	7723-14-0	0.0003	0.0005

Pad Plating : Au pad 0.3 µm ~ 1.0µm with under plate of Ni 1.27 µm ~ 8.89 µm