

## CONSTITUTION MATERIALS LIST

The RoHS directive, REACH regulation, and other laws and regulations related to the management of environmentally hazardous substances come into effect. When developing products, the global environmental load must be considered. ROHM pursues green procurement and endeavors to increase the detection accuracy of chemicals contained in parts and procured materials while at the same time placing great importance on the internal chemical management system that was built to ensure that no prohibited substances are procured, used, or shipped in order to provide a steady supply of worry-free products.

TR-SOP8\_AuCuAl-HF-JE\_Rev.6

Туре	Package Code	ROHM Package	Mass (mg)	Part No.	
Transistor	-	HSOP8 (Halogen free)	95.6200	-	

Nº	Part Name	Weight (mg)	Substance Name		CAS №	Weight (mg)	Portion vs. Products	Portion vs. Part Name
1	Mold compound	22.5202	Silica (amorphous)		60676-86-0	19.6264	20.53%	87.15%
			Epoxy resin		-	1.6890	1.77%	7.50%
			Phenol-formaldehyde resin		-	1.1260	1.18%	5.00%
			Carbon black		1333-86-4	0.0788	0.08%	0.35%
			Subtotal			22.5202	23.55%	100%
2	Lead frame (Base material)	59.4035	Copper (Cu)		7440-50-8	58.0075	60.66%	97.65%
			Iron (Fe)		7439-89-6	1.3960	1.46%	2.35%
				Subtotal		59.4035	62.12%	100%
3	Lead frame (Surface treatment)	0.6580	Silver (Ag)		7440-22-4	0.6580	0.69%	100.00%
				Subtotal		0.6580	0.69%	100%
4	External plating	1.2796	Tin (Sn)		7440-31-5	1.2796	1.34%	100.00%
				Subtotal		1.2796	1.34%	100%
5	Die	3.2511	Silicon (Si)		7440-21-3	3.1724	3.32%	97.58%
			Nickel (Ni)		7440-02-0	0.0419	0.04%	1.29%
			Silver (Ag)		7440-22-4	0.0260	0.03%	0.80%
			Gold (Au)		7440-57-5	0.0107	0.01%	0.33%
				Subtotal		3.2511	3.40%	100%
6	Die attach	6.3942	Lead (Pb) *1		7439-92-1	6.1064	6.39%	95.50%
			Tin (Sn)		7440-31-5	0.1279	0.13%	2.00%
			Silver (Ag)		7440-22-4	0.1599	0.17%	2.50%
				Subtotal		6.3942	6.69%	100%
7	Bonding wire	0.0218	Gold (Au)		7440-57-5	0.0218	0.02%	100.00%
				Subtotal		0.0218	0.02%	100%
8	Bonding wire	0.4716	Copper (Cu)		7440-50-8	0.4716	0.49%	100.00%
				Subtotal		0.4716	0.49%	100%
9	Bonding wire	1.6200	Aluminum (AI)		7429-90-5	1.6200	1.69%	100.00%
				Subtotal		1.6200	1.69%	100%
					-	95.6200	100%	-

### Note

\*1 : It is exempted from the RoHS, because of the high melting point solder.

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