Silicon Power Solutions™

LQFP-48 Lead Free RoHS Profile

Total Mass of the Unit specified (g):	Product / Component Description	Breakdown of product / component (e.g. chassis, transformer, lead frame, encapsulation, etc.)	Material Name (e.g. Sn alloy)	Substance Name (e.g. Copper (Cu))	CAS No.	Substance Mass (mg)	PPM	Additional Information
0.185	**LQFP 48L**	IC Chip	Silicon doped with aluminium	Silicon (Si)	7440-21-3	8.893500	47,948	
		IC Chip	Silicon doped with aluminium	Aluminium (Al)	7429-90-5	0.017000	92	
		IC Lead Frame	Copper alloy	Copper (Cu)	7440-50-8	55.261700	297,938	C7025CDA7025
		IC Lead Frame	Copper alloy	Nickel (Ni)	7440-02-0	1.723300	9,291	
		IC Lead Frame	Copper alloy	Silicon	7440-21-3	0.373300	2,013	
		IC Lead Frame	Copper alloy	Magnesium	7439-95-4	0.086160	465	
		IC Lead Frame	LF Plating	Silver (Ag)	7440-22-4	1.440200	7,765	
		IC Sn solder plating	Tin solder	Tin (Sn)	7440-31-5	3.820800	20,599	100% Matte Sn plating
		IC die attach	Epoxy filler - Ag	Silver (Ag)	7440-22-4	1.295970	6,987	Ablestik 3230
		IC die attach	Epoxy base material		N/A	0.365500	1,971	
		IC bond wire	Gold wire	Gold (Au)	7440-57-5	1.196200	6,449	
		IC bond wire	Gold wire	Silver (Ag)	7440-22-4	0.000006	0.03	
		IC bond wire	Gold wire	Calcium (Ca)	7440-70-2	0.000006	0.03	
		IC encapsulation	Molding compound	Multi-aromatic (resin)	N/A	13.299500	71,703	Sumitomo EME G700L
		IC encapsulation	Molding compound	Silica (SiO2)	60676-86-0	97.529650	525,821	
		IC coating	Die coating	Resin	N/A	0.160020	863	Dow Corning Q3-6646
		IC coating	Die coating	Catalyst	N/A	0.017780	96	

Total mass (mg)	185.481