MICROCHIP

Semiconductor Device Type: **T5X** **TQFP-32-7x7x1mm-MatteTin**

Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm
Aluminium	7429-90-5	Die	0.00	0.01	48
Titanium	7440-32-6	Die	0.00	0.00	4
Tungsten	7440-33-7	Die	0.02	0.03	229
Silicon	7440-21-3	Die	1.37	1.92	13720
Copper	7440-50-8	Leadframe	35.57	49.79	355674
Silicon	7440-21-3	Leadframe	0.46	0.64	4565
Nickel	7440-02-0	Leadframe	1.60	2.24	15977
Magnesium	7439-95-4	Leadframe	0.11	0.16	1141
Silver	7440-22-4	Leadframe	0.30	0.43	3043
Silver	7440-22-4	Die Attach	0.56	0.79	5616
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	7534-94-3	Die Attach	0.07	0.10	720
Dodecyl acrylate	2156-97-0	Die Attach	0.07	0.10	720
1,6-Hexanediol diacrylate	13048-33-4	Die Attach	0.01	0.01	72
1-Methyl-2-pyrrolidone	872-50-4	Die Attach	0.01	0.01	72
Silica	60676-86-0	Mold Compound	47.82	66.94	478161
Epoxy Resin	Trade Secret	Mold Compound	5.87	8.21	58670
Phenol Resin	Trade Secret	Mold Compound	4.69	6.57	46936
Carbon Black	1333-86-4	Mold Compound	0.29	0.41	2934
Copper	7440-50-8	Wire	1.03	1.44	10261
Palladium	7440-05-3	Wire	0.03	0.04	321
Gold	7440-57-5	Wire	0.01	0.01	107
Silver	7440-22-4	Wire	0.00	0.00	11
Tin	7440-31-5	Anode Ball	0.10	0.14	999
		TOTALS:	**100.00**	**140.00**	**1,000,000**

140.00 mg Total Mass

Package Homogeneous Materials

1.96	**(mg) Total**	**Die**	**% of Total Weight**	**1.40**
	Aluminium	7429-90-5	0.34	
	Titanium	7440-32-6	0.03	
	Tungsten	7440-33-7	1.63	
	Silicon	7440-21-3	98.00	
		Total	**100.00**	
53.26	**(mg) Total**	**Lead Frame**	**% of Total Weight**	**38.04**
	Copper	7440-50-8	93.50	
	Silicon	7440-21-3	1.20	
	Nickel	7440-02-0	4.20	
	Magnesium	7439-95-4	0.30	
	Silver	7440-22-4	0.80	
		Total	**100.00**	
1.01	**(mg) Total**	**Die Attach**	**% of Total Weight**	**0.72**
	Silver	7440-22-4	78.00	
	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	7534-94-3	10.00	
	Dodecyl acrylate	2156-97-0	10.00	
	1,6-Hexanediol diacrylate	13048-33-4	1.00	
	1-Methyl-2-pyrrolidone	872-50-4	1.00	
		Total	**100.00**	
82.14	**(mg) Total**	**Mold Compound**	**% of Total Weight**	**58.67**
	Silica	60676-86-0	81.50	
	Epoxy Resin	Trade Secret	10.00	
	Phenol Resin	Trade Secret	8.00	
	Carbon Black	1333-86-4	0.50	
		Total	**100.00**	
1.50	**(mg) Total**	**Wire**	**% of Total Weight**	**1.07**
	Copper	7440-50-8	95.90	
	Palladium	7440-05-3	3.00	
	Gold	7440-57-5	1.00	
	Silver	7440-22-4	0.10	
		Total	**100.00**	
0.14	**(mg) Total**	**Anode Ball**	**% of Total Weight**	**0.10**
	Tin	7440-31-5	100.00	
140.00		**Total**	**100.00**	100.00

The information contained in this Material Content Declaration (MCD) consists of package-level information and is not part number specific. This information is considered to be sufficiently representative of all part numbers for the package type.

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