MICROCHIP

Semiconductor Device Type: **A3X-MSOP-8-3x3mm-MatteTin**

Sub-Component	Basic Substance	CAS Number	% Total Weight	mg/part	ppm
Mold Compound	Epoxy Resin A	Trade Secret	5.59	1.43	55860
Mold Compound	Epoxy Resin B	Trade Secret	1.60	0.41	15960
Mold Compound	Phenol Resin	Trade Secret	1.60	0.41	15960
Mold Compound	Silica(Amorphous)	60676-86-0	70.62	18.08	706230
Mold Compound	Carbon Black	1333-86-4	0.40	0.10	3990
Lead Frame	Copper	7440-50-8	10.17	2.60	101745
Lead Frame	Iron	7439-89-6	0.24	0.06	2415
Lead Frame	Phosphorus	7723-14-0	0.01	0.00	105
Lead Frame	Zinc	7440-66-6	0.01	0.00	105
Lead Frame	Silver	7440-22-4	0.06	0.02	630
Die Attach	2,2'-[[2-(oxiranylmethoxy)-1,3-phenylene]bis(methylene)]bisoxirane	13561-08-5	0.01	0.00	75
Die Attach	Fatty acids, C18-unsatd., dimers, polymers with epichlorohydrin	68475-94-5	0.01	0.00	75
Die Attach	bisphenol-F- (epichlorhydrin)	9003-36-5	0.01	0.00	75
Die Attach	Silver	7440-22-4	0.73	0.19	7275
Die	Silicon	7440-21-3	7.50	1.92	75000
Wire Bond	Copper	7440-50-8	0.20	0.05	1960
Wire Bond	Palladium	7440-05-3	0.00	0.00	40
Plating on external leads	Tin	7440-31-5	1.25	0.32	12500
		TOTALS:	100.00	25.60	1,000,000

25.60 mg Total Mass

Package Homogeneous Materials

20.43	(mg) Total	Mold Compound	% of Total Weight	79.80
	Epoxy Resin A	Trade Secret	7.00	
	Epoxy Resin B	Trade Secret	2.00	
	Phenol Resin	Trade Secret	2.00	
	Silica(Amorphous)	60676-86-0	88.50	
	Carbon Black	1333-86-4	0.50	
		Total	100.00	

2.69	(mg) Total	Lead Frame	% of Total Weight	10.50
	Copper	7440-50-8	96.90	
	Iron	7439-89-6	2.30	
	Phosphorus	7723-14-0	0.10	
	Zinc	7440-66-6	0.10	
	Silver	7440-22-4	0.60	
		Total	100.00	

0.19	(mg) Total	Die Attach	% of Total Weight	0.75
	2,2'-[[2-(oxiranylmethoxy)-1,3-phenylene]bis(methylene)]bisoxirane	13561-08-5	1.00	
	Fatty acids, C18-unsatd., dimers, polymers with epichlorohydrin	68475-94-5	1.00	
	bisphenol-F- (epichlorhydrin)	9003-36-5	1.00	
	Silver	7440-22-4	97.00	
		Total	100.00	

1.92	(mg) Total	Die	% of Total Weight	7.50
	Silicon	7440-21-3	100.00	
		Total	100.00	

0.05	(mg) Total	Wire Bond	% of Total Weight	0.20
	Copper	7440-50-8	98.00	
	Palladium	7440-05-3	2.00	
		Total	100.00	

0.32	(mg) Total	Plating on external leads	% of Total Weight	1.25
	Tin	7440-31-5	100.00	
25.60		Total	100.00	100.00

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