

Product / Package Information

Package	PDIP - AD246JN
Body Size (mm)	
Lead Count	4
Terminal Finish	
MS Number	

Environmental Information

RoHS Compliant
High Temperature Compliant
Halogen Free Compliant
REACH SVHC Compliant

Materials Declaration

Laminate							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Glass Fiber	Silicon Dioxide	14808-60-7	1.04E-01	81.40	814000	2.11	21069
Copper & its alloys	Copper	7440-50-8	1.10E-02	8.61	86050	0.22	2227
Other organic materials	DGEBA (Difunction-epoxy)	1675-54-3	4.36E-03	3.40	34000	0.09	880
Other organic materials	Tetrafunction-epoxy	79-94-7	4.23E-03	3.30	33000	0.09	854
Tin & its alloys	Tin	7440-31-5	3.34E-03	2.60	26000	0.07	673
Other organic materials	DICY	461-58-5	8.98E-04	0.70	7000	0.02	181
Subtotal			1.28E-01	100.01	1000050	2.59	25883

Molding Compound							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Epoxy Resin	25068-38-6	9.21 E-02	64.50	645000	1.86	18576
Other inorganic materials	Inorganic Filler	Proprietary	2.53 E-02	17.70	177000	0.51	5098
Other organic materials	Hardener	Proprietary	2.28 E-02	16.00	160000	0.46	4608
Other organic materials	Thixotropic Agent	Proprietary	1.78 E-03	1.25	12500	0.04	360
Other organic materials	Black Pigment	Proprietary	7.85 E-04	0.55	5500	0.02	158
Subtotal			1.43 E-01	100.00	1000000	2.88	28800

Solder							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	2.21 E-01	65.0	650000	4.46	44565
Tin & its alloys	Lead	7439-92-1	1.19 E-01	35.0	350000	2.40	23996
Subtotal			3.40 E-01	100.0	1000000	6.86	68561

Encapsulant							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Dimethyl Siloxane, dimethylvinyl-terminated	68083-19-2	1.24 E-01	60.00	600000	2.51	25056
Other inorganic materials	Quartz	14808-60-7	7.45 E-02	36.00	360000	1.50	15033
Other inorganic materials	Zinc Oxide	1324-13-2	6.21 E-03	3.00	30000	0.13	1253
Other inorganic materials	Carbon Black	1333-86-4	2.07 E-03	1.00	10000	0.04	418
Subtotal			2.07 E-01	100.00	1000000	4.18	41759

Die Attach 1							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Bisphenol A Type Epoxy resin	25068-38-6	1.35E-01	70.00	700000	2.73	27325
Other inorganic materials	Aluminum Hydroxide	21645-51-2	3.19E-02	16.50	165000	0.644	6441
Other organic materials	Flame retardant	84852-53-9	1.55E-02	8.00	80000	0.312	3123
Other organic materials	Pigment	1333-86-4	1.06E-02	5.50	55000	0.2147	2147
Subtotal			1.94 E-01	100.0	1000000	3.90	39036

Die Attach 2							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	4-(4-aminophenyl)methyl)aniline	Proprietary	1.29 E-01	66.50	665000	2.60	25959
Other organic materials	Benzyl Alcohol	Proprietary	5.42 E-02	28.00	280000	1.09	10930
Other organic materials	Salicylic Acid	Proprietary	1.06 E-02	5.50	55000	0.21	2147
Subtotal			1.94 E-01	100.0	1000000	3.90	39036

Capacitor 1							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Barium Titanate	12047-27-7	1.44 E-02	76.07	760700	0.291	2911
Copper & its alloys	Copper	7440-50-8	2.13 E-03	11.22	112200	0.043	429
Nickel & its alloys	Nickel	7440-02-0	1.61 E-03	8.50	85000	0.033	325
Tin & its alloys	Tin	7440-31-5	4.27 E-04	2.25	22500	0.009	86
Others	Miscellaneous	Proprietary	3.72 E-04	1.96	19600	0.008	75
Subtotal			1.90 E-02	100.00	1000000	0.383	3827

Capacitor 2							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other non-ferrous metals and alloys	Tantalum	7440-25-7	8.99 E-03	15.34	153400	0.181	1814
Other inorganic materials	Oxygen	7782-44-7	1.17 E-02	19.88	198800	0.235	2351
Copper & its alloys	Copper	7440-50-8	7.97 E-03	13.60	136000	0.161	1609
Other inorganic materials	Silicon	7440-21-3	6.80 E-03	11.60	116000	0.137	1372
Precious metals	Silver	7440-22-4	6.30 E-03	10.74	107400	0.127	1270
Other non-ferrous metals and alloys	Manganese	7439-96-5	4.90 E-03	8.36	83600	0.099	989
Other inorganic materials	Carbon	7440-44-0	5.39 E-03	9.20	92000	0.109	1088
Nickel & its alloys	Nickel	7440-02-0	2.21 E-03	3.77	37700	0.045	446
Zinc & its alloys	Zinc	7440-66-6	2.08 E-03	3.55	35500	0.042	420
Tin & its alloys	Tin	7440-31-5	1.23 E-03	2.09	20900	0.025	247
Others	Miscellaneous	Proprietary	8.15 E-04	1.39	13900	0.016	164
Iron & its alloys	Iron	7439-89-6	1.76 E-04	0.30	3000	0.004	35
Other inorganic materials	Flourine	7782-41-4	1.06 E-04	0.18	1800	0.002	21
Subtotal			5.86 E-02	100.00	1000000	1.18	11828

IC 1							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	7.51 E-05	0.06	600	0.0015	15
Other inorganic materials	Silicon	7440-21-3	1.41 E-03	1.13	11300	0.0285	285
Copper & its alloys	Copper	7440-50-8	4.76 E-02	37.98	379800	0.9593	9593
Copper & its alloys	Iron	7439-89-6	1.16 E-03	0.93	9300	0.0235	235
Copper & its alloys	Zinc	7440-66-6	1.25 E-05	0.01	100	0.0003	3
Copper & its alloys	Phosphorous	7723-14-0	1.25 E-05	0.01	100	0.0003	3
Other organic materials	Resin	Proprietary	1.63 E-04	0.13	1300	0.0033	33
Precious metals	Silver	7440-22-4	6.39 E-04	0.51	5100	0.0129	129
Nickel & its alloys	Nickel	7440-02-0	1.88 E-04	0.15	1500	0.0038	38
Others	Miscellaneous	Proprietary	3.48 E-03	2.78	27800	0.0702	702
Other inorganic materials	Silica	60676-86-0	5.84 E-02	46.68	466800	1.1790	11790
Other organic materials	1,4-bis(methoxymethyl)benzene/phenol copolymer	26834-02-6	2.95 E-03	2.36	23600	0.0596	596
Other inorganic materials	Magnesium Hydroxide (Mg(OH)2)	1309-42-8	4.44 E-03	3.55	35500	0.0897	897
Other organic materials	Tetramethylbiphenyl diglycidyl ether	85954-11-6	1.48 E-03	1.18	11800	0.298	298
Other inorganic materials	Carbon black	1333-86-4	1.50 E-04	0.12	1200	0.0030	30
Others	Miscellaneous	Proprietary	3.03 E-03	2.42	24200	0.0611	611
Subtotal			1.25 E-01	100.00	1000000	2.53	25257

IC 2							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silica	60676-86-0	3.89 E-02	31.85	318500	0.784	7839
Other organic materials	Resin	Proprietary	4.56 E-03	3.74	37400	0.092	920
Copper & its alloys	Copper	7440-50-8	6.69 E-02	54.82	548200	1.349	13492
Copper & its alloys	Iron	7439-89-6	1.81 E-03	1.48	14800	0.036	364
Copper & its alloys	Silver	7440-22-4	7.69 E-04	0.63	6300	0.016	155
Copper & its alloys	Zinc	7440-66-6	1.34 E-04	0.11	1100	0.003	27
Precious Metals	Silver	7440-22-4	3.33 E-03	2.73	27300	0.067	672
Other organic materials	Epoxy	129915-35-1	1.11 E-03	0.91	9100	0.022	224
Tin & its alloys	Tin	7440-31-5	3.27 E-03	2.68	26800	0.066	660
Other inorganic materials	Silicon	7440-21-3	9.76 E-04	0.80	8000	0.020	197
Copper & its alloys	Copper	7440-50-8	3.05 E-04	0.25	2500	0.006	62
Subtotal			1.22 E-01	100.00	1000000	2.46	24612

Diode							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other Organic Materials	Ortho Cresol Novolac Resin	29690-82-2	4.90 E-04	6.03	60300	0.0099	99
Other Organic Materials	Phenolic Resin	9003-35-4	4.90 E-04	6.03	60300	0.0099	99
Other Inorganic Materials	Silica	60676-86-0	3.18 E-03	39.17	391700	0.0642	642
Other Inorganic Materials	Aluminum hydroxide	21645-51-2	7.11 E-04	8.74	87400	0.0143	143
Other Inorganic Materials	Carbon black	1333-86-4	2.44 E-05	0.30	3000	0.0005	5
Copper and Its Alloys	Copper	7440-50-8	2.51 E-04	3.09	30900	0.0051	51
Copper and Its Alloys	Iron	7439-89-6	1.25 E-03	15.34	153400	0.0252	252
Copper and Its Alloys	Nickel	7440-02-0	9.02 E-04	11.10	111000	0.0182	182
Copper and Its Alloys	Silver	7440-22-4	5.20 E-04	6.39	63900	0.0105	105
Tin & its alloys	Tin	7440-31-5	1.40 E-04	1.72	17200	0.0028	28
Other Inorganic Materials	Silicon	7440-21-3	1.60 E-04	1.97	19700	0.0032	32
Copper and Its Alloys	Copper	7440-50-8	9.76 E-06	0.12	1200	0.0002	2
Subtotal			8.13 E-03	100.00	1000000	0.16	1640

Resistor							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics	Aluminum Oxide	1344-28-1	6.94 E-03	36.31	363128	0.1400	1400
Ceramics	Silicone Dioxide	7631-86-9	8.10 E-04	4.24	42397	0.0163	163
Ceramics	Silicate	Proprietary	3.60 E-04	1.88	18829	0.0073	73
Ceramics	Miscellaneous	Proprietary	4.98 E-05	0.26	2604	0.0010	10
Other organic materials	GF-Fibre	1333-86-4	6.80 E-04	3.56	35558	0.0137	137
Other organic materials	Polyacrylate	Proprietary	1.33 E-03	6.96	69559	0.0268	268
Other organic materials	Pigment portion	Proprietary	1.01 E-06	0.01	53	0.0000	0
Nickel & its alloys	Nickel	7440-02-0	4.00 E-06	0.02	209	0.0001	1
Other Nonferrous Metals and Alloys	Chromium	7440-22-4	6.00 E-06	0.03	314	0.0001	1
Ferrous Alloys	Iron	7439-89-6	8.04 E-03	42.05	420525	0.1621	1621
Ferrous Alloys	Copper	7440-50-8	8.94 E-05	0.47	4678	0.0018	18
Ferrous Alloys	Tin	7440-31-5	4.50 E-04	2.35	23529	0.0091	91
Ferrous Alloys	Nickel	7440-02-0	3.10 E-04	1.62	16232	0.0063	63
Ferrous Alloys	Phosphorous	7723-14-0	1.79 E-05	0.09	936	0.0004	4
Ferrous Alloys	Miscellaneous	Proprietary	2.77 E-05	0.15	1450	0.0006	6
Subtotal			1.91 E-02	100.00	1000000	0.39	3856

Housing							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic material	Polymer	Proprietary	3.40 E+00	100.00	1000000	68.59	685905

Package Totals	Weight (g)	Percentage (%)	PPM
	4.96 E+00	100.00	1000000

Note: The information provided in this declaration are true to the best of ADI's knowledge. ADI derived most of the information listed in this declaration from documents provided by third parties, and assumes no liability to any inaccuracy of such information.



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