

AP1086DG-13, AP1086DG-U, AP1086D15G-13, AP1086DG15-U, AP1086D18G-13, AP1086DG18-U,
AP1086D25G-13, AP1086DG25-U, AP1086D33G-13, AP1086DG33-U, AP1086D50G-13, AP1086DG50-U,

Part Number: **Analog TO252-3L Green See List above**
Weight (mg): 315.88

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.45	1.43	1000000	4527
Leadframe	12SnOFC (HCL-12S)	Cu	7440-50-8	99.88%	53.15	167.90	998800	530893
		Sn	7440-31-5	0.12%			1200	638
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.42	1.32	1000000	4179
Bond Wire	Copper Wire	Copper	7440-50-8	100.00%	0.13	0.42	1000000	1330
Encapsulation	EME-G700	Epoxy Resin	-----	7.50%	44.50	140.57	75000	33376
		Phenol Resin	-----	5.00%			50000	22251
		Bismuth/Bismuth compound	-----	1.00%			10000	4450
		SiO2	60676-86-0	86.00%			860000	382709
		C	1333-86-4	0.50%			5000	2225
Die Attach Epoxy	8352L	Ag	7440-22-4	66.50%	0.14	0.45	665000	947
		Epoxy Resin	----	20.00%			200000	285
		Aliphatic anhydride	----	7.50%			75000	107
		2-Butoxyethyl acetate	112-07-2	3.00%			30000	43
		Polymeric material	----	3.00%			30000	43
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	1.20	3.79	1000000	11998
Total					100.00	315.88		1000000

Tolerance ±10%

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* The Silicon Chip is doped at atomic levels with trace amounts of elements that may include Phosphorus, Boron, Arsenic, and other elements. Metalization may include Titanium, Nickel, Aluminum, Silver or Gold. These substances are not reported where their concentration is less than the minimum reportable level per the guidelines specified in the Tables of EIA JIG-101, [Material Composition Declaration for Electronic Products](#).

This product or product family does not contain any of the following substances except as **CURRENTLY** exempted by ELV II and RoHS and reported above:

Asbestos

Antimony Compounds

Azo compounds

Cadmium and cadmium compounds

Certain Shortchain Chlorinated Paraffins

Chlorinated organic compounds

Halogens

Hexavalent chromium compounds

Lead and lead compounds

Mercury and mercury compounds

Organic tin compounds

Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)

Ozone Depleting Substances - Class II (HCFCs)

Perfluorooctane Sulphonate (PFOS) or related compounds

Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including **DecaBDE**

Polychlorinated Biphenyls (PCBs)

Polychlorinated Naphthalenes (> 3 chlorine atoms)

Radioactive Substances

Tributyl Tin (TBT) and Triphenyl Tin (TPT)

Tributyl Tin Oxide (TBTO)

REACH SVHCs:

Anthracene

4,4'- Diaminodiphenylmethane

Dibutyl phthalate

Cyclododecane

Cobalt dichloride

Diarsenic pentaoxide

Diarsenic trioxide

Sodium dichromate, dihydrate

5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)

Bis (2-ethyl(hexyl)phthalate) (DEHP)

Hexabromocyclododecane (HBCDD)

Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)

Bis(tributyltin)oxide

Lead hydrogen arsenate

Triethyl arsenate

Benzyl butyl phthalate

AP1086KL-13, AP1086KL-U, AP1086K15L-13, AP1086KL15-U, AP1086K18L-13, AP1086KL18-U,
AP1086K25L-13, AP1086KL25-U, AP1086K33L-13, AP1086KL33-U, AP1086K50L-13, AP1086KL50-U,

Part Number: **Analog TO263AB See List above**
Weight (mg): 1399.81

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.10	1.43	1000000	1022
Leadframe	KFC	Cu	7440-50-8	99.87%	57.22	801.00	998700	571477
		Fe	1309-37-1	0.10%			1000	572
		P	7723-14-0	0.03%			300	172
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.18	2.57	1000000	1836
Bond Wire	Copper Wire	Copper	7440-50-8	100.00%	0.03	0.47	1000000	336
Encapsulation	CEL-4600	Resin	-----	23.00%	41.90	586.56	230000	96377
		Aromatic brominated compound	-----	2.30%			23000	9638
		SiO2	60676-86-0	71.60%			716000	300024
		Sb2O3	1309-64-4	2.80%			28000	11733
		Carbon black	1333-86-4	0.30%			3000	1257
Die Attach Epoxy	84-1LMISR4	Ag	7440-22-4	75.00%	0.04	0.54	750000	289
		epoxy resin	Trade secret	20.00%			200000	77
		curing agent & hardener	Trade secret	5.00%			50000	19
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	0.52	7.24	1000000	5172
Total					100.00	1399.81		1000000

Tolerance ±10%

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This product or product family does not contain any of the following substances except as **CURRENTLY** exempted by ELV II and RoHS **and** reported above:

Asbestos	Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Azo compounds	Ozone Depleting Substances - Class II (HCFCs)
Cadmium and cadmium compounds	Perfluorooctane Sulphonate (PFOS) or related compounds
Certain Shortchain Chlorinated Paraffins	Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE
Chlorinated organic compounds	Polychlorinated Biphenyls (PCBs)
Hexavalent chromium compounds	Polychlorinated Naphthalenes (> 3 chlorine atoms)
Lead and lead compounds	Radioactive Substances
Mercury and mercury compounds	Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Organic tin compounds	Tributyl Tin Oxide (TBTO)

REACH SVHCs:

Anthracene	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
4,4'- Diaminodiphenylmethane	Bis (2-ethyl(hexyl)phthalate) (DEHP)
Dibutyl phthalate	Hexabromocyclododecane (HBCDD)
Cyclododecane	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)
Cobalt dichloride	Bis(tributyltin)oxide
Diarsenic pentaoxide	Lead hydrogen arsenate
Diarsenic trioxide	Triethyl arsenate
Sodium dichromate, dihydrate	Benzyl butyl phthalate

AP1086TL-U, AP1086TL15-U, AP1086TL18-U, AP1086TL25-U, AP1086TL33-U, AP1086TL50-U,

Part Number: **Analog TO220-3L See List above**
Weight (mg): 1851.95

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.08	1.43	1000000	772
Leadframe	KFC	Cu	7440-50-8	99.87%	64.19	1188.74	998700	641051
		Fe	1309-37-1	0.10%			1000	642
		P	7723-14-0	0.03%			300	193
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.13	2.36	1000000	1274
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.05	0.85	1000000	459
Encapsulation	CEL-4600	Resin	-----	23.00%	34.20	633.45	230000	78670
		Aromatic brominated compound	-----	2.30%			23000	7867
		SiO2	60676-86-0	71.60%			716000	244904
		Sb2O3	1309-64-4	2.80%			28000	9577
		Carbon black	1333-86-4	0.30%			3000	1026
Die Attach Epoxy	84-1LMISR4	Ag	7440-22-4	75.00%	0.03	0.54	750000	219
		epoxy resin	Trade secret	20.00%			200000	58
		Curing Agent & Hardener	Trade secret	5.00%			50000	15
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	1.33	24.58	1000000	13272
				Total	100.00	1851.95		1000000

Tolerance ±10%

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This product or product family does not contain any of the following substances except as **CURRENTLY** exempted by ELV II and RoHS and reported above:

Asbestos	Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Azo compounds	Ozone Depleting Substances - Class II (HCFCs)
Cadmium and cadmium compounds	Perfluorooctane Sulphonate (PFOS) or related compounds
Certain Shortchain Chlorinated Paraffins	Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE
Chlorinated organic compounds	Polychlorinated Biphenyls (PCBs)
Hexavalent chromium compounds	Polychlorinated Naphthalenes (> 3 chlorine atoms)
Lead and lead compounds	Radioactive Substances
Mercury and mercury compounds	Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Organic tin compounds	Tributyl Tin Oxide (TBTO)

REACH SVHCs:

Anthracene	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
4,4'- Diaminodiphenylmethane	Bis (2-ethyl(hexyl)phthalate) (DEHP)
Dibutyl phthalate	Hexabromocyclododecane (HBCDD)
Cyclododecane	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)
Cobalt dichloride	Bis(tributyltin)oxide
Diarsenic pentaoxide	Lead hydrogen arsenate
Diarsenic trioxide	Triethyl arsenate
Sodium dichromate, dihydrate	Benzyl butyl phthalate

AP1086DL-13, AP1086DL-U, AP1086D15L-13, AP1086DL15-U, AP1086D18L-13, AP1086DL18-U,
AP1086D25L-13, AP1086DL25-U, AP1086D33L-13, AP1086DL33-U, AP1086D50L-13, AP1086DL50-U,

Part Number: **Analog TO252-3L Lead Free See List above**
Weight (mg): 312.46

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.46	1.43	1000000	4527
Leadframe	12SnOFC (HCL-12S)	Cu	7440-50-8	99.88%	53.73	167.90	998800	530893
		Sn	7440-31-5	0.12%			1200	638
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.42	1.32	1000000	4179
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.13	0.42	1000000	1330
Encapsulation	EME-6600CSP	SiO2	60676-86-0	77.20%	43.86	137.06	772000	343548
		Epoxy Resin	-----	10.00%			100000	44501
		Bismuth/Bismuth compound	-----	1.00%			10000	4450
		Phenol Novolac	9003-35-4	5.00%			50000	22251
		Antimony trioxide	1309-64-4	3.00%			30000	13350
		Brominated epoxy resin	68541-56-0	3.50%			35000	15575
		C	1333-86-4	0.30%			3000	1335
Die Attach Epoxy	84-1LMISR4	Ag	7440-22-4	75.00%	0.17	0.54	750000	1068
		epoxy resin	Trade secret	20.00%			200000	285
		curing agent & hardener	Trade secret	5.00%			50000	71
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	1.21	3.79	1000000	11998
Total					100.00	312.46		1000000

Tolerance ±10%

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This product or product family does not contain any of the following substances except as **CURRENTLY** exempted by ELV II and RoHS and reported above:

Asbestos	Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Azo compounds	Ozone Depleting Substances - Class II (HCFCs)
Cadmium and cadmium compounds	Perfluorooctane Sulphonate (PFOS) or related compounds
Certain Shortchain Chlorinated Paraffins	Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE
Chlorinated organic compounds	Polychlorinated Biphenyls (PCBs)
	Polychlorinated Naphthalenes (> 3 chlorine atoms)
Hexavalent chromium compounds	Radioactive Substances
Lead and lead compounds	Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Mercury and mercury compounds	Tributyl Tin Oxide (TBTO)
Organic tin compounds	
REACH SVHCs:	
Anthracene	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
4,4'-Diaminodiphenylmethane	Bis (2-ethyl(hexyl)phthalate) (DEHP)
Dibutyl phthalate	Hexabromocyclododecane (HBCDD)
Cyclododecane	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)
Cobalt dichloride	Bis(tributyltin)oxide
Diarsenic pentaoxide	Lead hydrogen arsenate
Diarsenic trioxide	Triethyl arsenate
Sodium dichromate, dihydrate	Benzyl butyl phthalate