

Part Number: **1N4148W / 1N4448W -p-F**
Weight (mg): 10.487

p = package designator
See Data Sheet

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%	0.00	0.0433	1000000	4129
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	0.29	2.9954	576500	164666
		Ni	7440-02-0	41.00%			410000	117108
		Mn	7439-96-5	0.60%			6000	1714
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	286
		Co	7440-48-4	0.50%			5000	1428
		Si	7440-21-3	0.15%			1500	428
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.01	0.0909	1000000	8668
Bond Wire	Copper Wire	Cu	7440-50-8	100.00%	0.00	0.0064	1000000	610
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	0.68	7.1375	690000	469617
		Epoxy Resin	29690-82-2	14.00%			140000	95285
		Phenol Resin	9003-35-4	7.00%			70000	47642
		Mg(OH)2	1309-42-8	8.00%			80000	54448
		C	1333-86-4	0.20%			2000	1361
		others	---	1.80%			18000	12251
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	0.02	0.2135	1000000	20359
				Total	100.00	10.487		1000000

Tolerance ±10%

This data is based on information provided by our suppliers. We believe it to be correct but do not routinely validate it by measurement. It is for guidance only and Diodes Inc. does not guarantee its absolute accuracy or completeness

* 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 o

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:

Antimony compounds	Organic tin compounds
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)
Halogens	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)

This product or product family meet REACH requirements for chemicals designated by the European Chemicals Agency (ECHA) as Substances of Very High Concern (SVHC) appended below:

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