



Material Declaration

Device: GRF5519

RoHs Compliant: Yes

Conflict Mineral Check: Yes

Material Composition					
Material Part	Material	Material Trade Name	CAS No.	PPM	Substance Mass (g)
Die 1	Gallium Arsenide pHEMT	GaAs	1303-00-0	8804	0.000203
Mold compound G700	Silica Filler	SiO2	60676-86-0	349556	0.008060
	Epoxy resins	Epoxy resins	-	37471	0.000864
	Phenolic resins	Phenolic resins	-	27062	0.000624
	Carbon black	C	1333-86-4	2082	0.000048
Die Attach	Phenol/ formaldehyde	Resin	7440-22-4	87	0.000002
	Silver	Ag	-	1388	0.000032
	Diluent, proprietary	-	-	173	0.000004
	1, 6- bis(2, 3- epoxypropoxy)naphthalene	-	-	173	0.000004
Wire	Gold	Au	7440-57-5	5681	0.000131
	Calcium	Ca	7440-70-2	4	0.000000
	Cerium	Ce	7440-45-1	1	0.000000
	Palladium	Pd	7440-05-3	43	0.000001
Leadframe C194	Copper	Cu	7440-50-8	543806	0.012539
	Iron	Fe	7439-89-6	13097	0.000302
	Phosphorous	P	7723-14-0	173	0.000004
	Zinc	Zn	7440-66-6	651	0.000015
Frame Plating	Nickel	Ni	7440-02-0	8804	0.000203
	Palladium	Pd	7440-05-3	182	0.000004
	Gold	Au	7440-57-5	1	0.000000
	Silver	Ag	7440-22-4	1	0.000000
External Plating	Nickel	Ni	7440-02-0	651	0.000015
	Palladium	Pd	7440-05-3	65	0.000002
	Gold	Au	7440-57-5	43	0.000001
				Total mass (g)	0.02306

Note: CAS may not be available for proprietary materials. Material declaration is calculated from supplier provided data. Guerilla RF maintains on file Material Declaration, RoHS, REACH and Conflict Mineral Statements from our strategic suppliers.

More Info: <https://www.guerrilla-rf.com/environmental>

Questions: [environmental@guerrilla-rf.com](mailto:environmental@guerrilla-rf.com)