



MATERIAL DECLARATION DATA SHEET

Device Name	Package Type	Pkg Wt (g)			
M2GL025	FG484(23x23mm)	2.34			
Material Breakdown of Component	Material Breakdown (%)	Substance Name	CAS No.	Weight (g)	Substance Mass (%)
MOLD COMPOUND	39.79	Silica	60676-86-0	0.8631	92.7
		Resin	Proprietary	0.0466	5
		Metal Hydroxide	Proprietary	0.0186	2
		Carbon Black	1333-86-4	0.0028	0.3
				0.93105	100
SUBSTRATE	35.34	Bismaleimide/Triazine	13676-54-5	0.5429	65.65
		Copper (Cu)	7440-50-8	0.2642	31.95
		Gold (Au)	7440-57-5	0.0032	0.385
		Nickel (Ni)	7440-02-0	0.0167	2.015
				0.8270	100
DIE	1.28	Silicon	7440-21-3	0.0298	100
				0.0298	100
DIE ATTACH EPOXY	0.19	Silver	7440-22-4	0.0034	76
		Epoxy Resin	Proprietary	0.0011	24
				0.0045	100
SOLDER BALL	21.88	Tin	7440-31-5	0.3226	63
		Lead	7439-92-1	0.1895	37
				0.5121	100
GOLD WIRE	1.52	Gold	7440-57-5	0.0355	99.99
		Doping	Proprietary	0.0000	0.01
				0.0355	100
				2.3400	

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Revision No.	Date	Description of Change
	2/12/2014	Original release



MATERIAL DECLARATION DATA SHEET

Device Name	Package Type	Pkg Wt (g)			
M2GL025	FCS325(11x11mm)	0.2319			
Material Breakdown of Component	Material Breakdown (%)	Substance Name	CAS No.	Weight (g)	Substance Mass (%)
MOLD COMPOUND	36.07	Silica A	60676-86-0	0.0594	71.00
		Silica B	7631-86-9	0.0063	7.50
		Resin	Proprietary	0.0113	13.50
		Carbon Black	1333-86-4	0.0004	0.50
		Others	Proprietary	0.0063	7.50
				0.08365	100.00
SUBSTRATE	35.49	Resin	Proprietary	0.0201	24.44
		Glass Fiber	65997-17-3	0.0134	16.31
		Copper (Cu)	7440-50-8	0.0449	54.55
		Tin (Sn)	7440-31-5	0.0017	2.05
		Others	Proprietary	0.0022	2.65
				0.0823	100.00
DIE	5.07	Silicon	7440-21-3	0.0117	100.00
				0.0117	100.00
UNDERFILL	2.11	Silica, vitreous	60676-86-0	0.0032	65.00
		p-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline	5026-74-4	0.0005	10.00
		Bisphenol F epoxy resin	9003-36-5	0.0005	10.00
		Bisphenol A epoxy resin	25068-38-6	0.0002	4.00
		Other aliphatic amine compounds	Proprietary	0.0003	7.00
		Carbon Black	1333-86-4	0.0000	1.00
		Proprietary Additives	Proprietary	0.0001	3.00
				0.0049	100.00
SOLDER BALL	17.42	Tin (Sn)	7440-31-5	0.0255	63.00
		Lead (Pb)	7439-92-1	0.0149	37.00
				0.0404	100.00
BUMP	3.84	Tin (Sn)	7440-31-5	0.0087	97.70
		Silver (Ag)	7440-22-4	0.0002	2.30
				0.0089	100.00
				0.2319	

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Revision No.	Date	Description of Change
1	2015/11/10	Original release



MATERIAL DECLARATION DATA SHEET

Device Name	Package Type	Pkg Wt (g)			
M2GL025	VF256(14x14mm)	0.7098			
Material Breakdown of Component	Material Breakdown (%)	Substance Name	CAS No.	Weight (g)	Substance Mass (%)
MOLD COMPOUND	35.66	Silica	60676-86-0	0.2104	83.14
		Resin	Proprietary	0.0301	11.88
		Silica, crystalline-quartz (SiO2)	14808-60-7	0.0111	4.38
		Carbon Black	1333-86-4	0.0013	0.50
		Others	Proprietary	0.0003	0.10
				0.25311	100.00
SUBSTRATE	41.81	Bismaleimide/Triazine	13676-54-5	0.1948	65.65
		Copper (Cu)	7440-50-8	0.0948	31.95
		Gold (Au)	7440-57-5	0.0011	0.39
		Nickel (Ni)	7440-02-0	0.0060	2.02
				0.2968	100.00
DIE	3.31	Silicon	7440-21-3	0.0235	100.00
				0.0235	100.00
DIE ATTACH EPOXY	0.42	Silver	7440-22-4	0.0023	76.00
		Epoxy resin	Proprietary	0.0007	24.00
				0.0030	100.00
SOLDER BALL	17.33	Tin	7440-31-5	0.0775	63.00
		Lead	7439-92-1	0.0455	37.00
				0.1230	100.00
GOLD WIRE	1.47	Gold (Au)	7440-57-5	0.0103	99.00
		Palladium	7440-05-3	0.0001	1.00
				0.0104	100.00
				0.7098	

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Revision No.	Date	Description of Change
1	11/10/2015	Original release



MATERIAL DECLARATION DATA SHEET

Device Name M2GL025	Package Type VF400	Pkg Wt (g) 0.9744			
Material Breakdown of Component	Material Breakdown (%)	Substance Name	CAS No.	Weight (g)	Substance Mass (%)
MOLD COMPOUND	38.39	Silica	60676-86-0	0.3142	84
		Resin	Proprietary	0.0591	15.8
		Carbon Black	1333-86-4	0.0007	0.2
				0.37407	100
SUBSTRATE	44.69	Bismaleimide/Triazine	13676-54-5	0.2859	65.65
		Copper (Cu)	7440-50-8	0.1391	31.95
		Gold (Au)	7440-57-5	0.0017	0.385
		Nickel (Ni)	7440-02-0	0.0088	2.015
				0.4355	100
DIE	3.06	Silicon	7440-21-3	0.0298	100
				0.0298	100
DIE ATTACH EPOXY	0.35	Silver	7440-22-4	0.0026	76
		Epoxy resin	Proprietary	0.0008	24
				0.0034	100
SOLDER BALL	12.10	Tin	7440-31-5	0.0743	63
		Lead	7439-92-1	0.0436	37
				0.1179	100
GOLD WIRE	1.41	Gold	7440-57-5	0.0137	99.99
		Doping	Proprietary	0.0000	0.01
				0.0137	100
				0.9744	

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Revision No.	Date	Description of Change
1	2014/6/25	Original release
2	2015/11/9	Add M2S060, M2GL060