

MATERIAL DECLARATION



PRODUCT IDENTIFICATION

- PRODUCT NAME Multi Layer Inductor
 - SERIES GHF
 - DIELECTRIC 0201
 - WEIGHT 0.00022mg
 - MANUFACTURE NAME Cal-Chip Electronics Inc.
 - ADDRESS 59 Steamwhistle Drive, Ivyland, PA 18974



GENERAL COMPOSITION

COMPOSITION OF PARTS		COMPOSITION OF MATERIALS				TYPICAL WEIGHT			P/N
BREAKDOWN OF PART	MATERIAL NAME	SAMPLE DESCRIPTION	CHEMICAL SYMBOL	CAS NO.	%	WEIGHT (MG)	SUBSTANCE MASS (MG)	PERCENTAGE (%)	SUBSTANCE PERCENTAGE
Ceramic Powder	Ceramic Powder	DJ1026	Al ₂ O ₃	1344-28-1	20	0.1870	0.03740	85	17
			Frit	65997-17-3	80		0.14960		68
Inner Coil	Silver Paste	AGN-88088TS	Ag	7440-22-4	87.0~89.0	0.0110	0.00968	5	4.4
			Ethyl Cellulose	9004-57-3	1~10		0.00022		0.1
			Diethylene Glycol Monobutyl Ether Acetate	124-17-4	5~10		0.00055		0.25
			Terpineol	10482-56-1	5~10		0.00055		0.25
Terminal Electrode	Silver Paste	IT-3760	Ag Powder	7440-22-4	58.0~62.0	0.0132	0.00805	6	3.66
			Resin	9004-57-3	2.0~10.0		0.00132		0.6
			Organic Solvent	112-15-2	12.0~25.0		0.00304		1.38
			Glass Powder	65997-17-3	3.0~13.0		0.00079		0.36
Ni Plating	Nickel	Vale S Nickel Pellets	Ni	7440-02-0	100	0.0033	0.0033	1.5	1.5
Sn Plating	Tin	SN 99.99A	Sn	7440-31-5	100	0.0055	0.0055	2.5	2.5
TOTAL									0.00022

MATERIAL DECLARATION



PRODUCT IDENTIFICATION

- PRODUCT NAME	Multi Layer Inductor
- SERIES	GHF
- SIZE	0402
- DIELECTRIC	0.001mg
- WEIGHT	Cal-Chip Electronics Inc.
- MANUFACTURE NAME	59 Steamwhistle Drive, Ivyland, PA 18974
- ADDRESS	



GENERAL COMPOSITION

COMPOSITION OF PARTS		COMPOSITION OF MATERIALS				TYPICAL WEIGHT			P/N
BREAKDOWN OF PART	MATERIAL NAME	SAMPLE DESCRIPTION	CHEMICAL SYMBOL	CAS NO.	%	WEIGHT (MG)	SUBSTANCE MASS (MG)	PERCENTAGE (%)	SUBSTANCE PERCENTAGE
Ceramic Powder	Ceramic Powder	DJ1048	Al ₂ O ₃	1344-28-1	20	0.85	0.17	85	17
			Frit	65997-17-3	80		0.68		68
Inner Coil	Silver Paste	AGN-88088TS	Ag	7440-22-4	87.0~89.0	0.05	0.044	5	4.4
			Ethyl Cellulose	9004-57-3	1~10		0.001		0.1
			Diethylene Glycol Monobutyl Ether Acetate	124-17-4	5~10		0.0025		0.25
			Terpineol	10482-56-1	5~10		0.0025		0.25
Terminal Electrode	Silver Paste	IT-3760	Ag Powder	7440-22-4	58.0~62.0	0.06	0.0366	6	3.66
			Resin	9004-57-3	2.0~10.0		0.006		0.6
			Organic Solvent	112-15-2	12.0~25.0		0.0138		1.38
			Glass Powder	65997-17-3	3.0~13.0		0.0036		0.36
Ni Plating	Nickel	Vale S Nickel Pellets	Ni	7440-02-0	100	0.015	0.015	1.5	1.5
Sn Plating	Tin	SN 99.99A	Sn	7440-31-5	100	0.25	0.025	2.5	2.5
TOTAL									0.001



MATERIAL DECLARATION



PRODUCT IDENTIFICATION

- PRODUCT NAME	Multi Layer Inductor
- SERIES	GHF
- DIELECTRIC	0603
- WEIGHT	0.003 mg
- MANUFACTURE NAME	Cal-Chip Electronics Inc.
- ADDRESS	59 Steamwhistle Drive, Ivyland, PA 18974



GENERAL COMPOSITION

COMPOSITION OF PARTS		COMPOSITION OF MATERIALS				TYPICAL WEIGHT			P/N
BREAKDOWN OF PART	MATERIAL NAME	SAMPLE DESCRIPTION	CHEMICAL SYMBOL	CAS NO.	%	WEIGHT (MG)	SUBSTANCE MASS (MG)	PERCENTAGE (%)	SUBSTANCE PERCENTAGE
Ceramic Powder	Ceramic Powder	DJ1026	Al ₂ O ₃	1344-28-1	22.7	2.55	0.57885	85	19.295
			Frit	65997-17-3	77.3		1.97115		65.705
Inner Coil	Silver Paste	AGN-8088TS	Silver	7440-22-4	87.0~89.0	0.15	0.132	5	4.4
			Ethyl Cellulose	9004-57-3	1~10		0.003		0.1
			Diethylene Glycol Monobutyl Ether Acetate	124-17-4	5~10		0.0075		0.25
			Terpineol	10482-56-1	5~10		0.0075		0.25
Terminal Electrode	Silver Paste	IT-3760	Ag Powder	7440-22-4	58.0~62.0	0.18	0.1098	6	3.66
			Resin	9004-57-3	2.0~10.0		0.018		0.6
			Organic Solvent	112-15-2	12.0~25.0		0.0414		1.38
			Glass Powder	65997-17-3	3.0~13.0		0.0108		0.36
Ni Plating	Nickel	Vale S Nickel Pellets	Ni	7440-02-0	100	0.045	0.045	1.5	1.5
Sn Plating	Tin	SN 99.99A	Sn	7440-31-5	100	0.075	0.075	2.5	2.5
TOTAL									0.003

MATERIAL DECLARATION



PRODUCT IDENTIFICATION

- PRODUCT NAME	Multi Layer Inductor
- SERIES	GHF
- SIZE	0805
- DIELECTRIC	0.007 mg
- WEIGHT	Cal-Chip Electronics Inc.
- MANUFACTURE NAME	59 Steamwhistle Drive, Ivyland, PA 18974
- ADDRESS	



GENERAL COMPOSITION

COMPOSITION OF PARTS		COMPOSITION OF MATERIALS				TYPICAL WEIGHT			P/N
BREAKDOWN OF PART	MATERIAL NAME	SAMPLE DESCRIPTION	CHEMICAL SYMBOL	CAS NO.	%	WEIGHT (MG)	SUBSTANCE MASS (MG)	PERCENTAGE (%)	SUBSTANCE PERCENTAGE
Ceramic Powder	Ceramic Powder	DJ1048	Al ₂ O ₃	1344-28-1	20	5.95	1.19	85	17
			Frit	65997-17-3	80		4.76		68
Inner Coil	Silver Paste	AGN-8088TS	Ag	7440-22-4	87.0~89.0	0.35	0.308	5	4.4
			Ethyl Cellulose	9004-57-3	1~10		0.007		0.1
			Diethylene Glycol Monobutyl Ether Acetate	124-17-4	5~10		0.0175		0.25
			Terpineol	10482-56-1	5~10		0.0175		0.25
Terminal Electrode	Silver Paste	IT-3760	Ag Powder	7440-22-4	58.0~62.0	0.42	0.2562	6	3.66
			Resin	9004-57-3	2.0~10.0		0.042		0.6
			Organic Solvent	112-15-2	12.0~25.0		0.0966		1.38
			Glass Powder	65997-17-3	3.0~13.0		0.0252		0.36
Ni Plating	Nickel	Vale S Nickel Pellets	Ni	7440-02-0	100	0.08	0.08	1.14	1.14286
Sn Plating	Tin	SN 99.99A	Sn	7440-31-5	100	0.2	0.2	2.86	2.85714
TOTAL									0.007

