



Material Declaration Data Sheet

CSNL1206 (Formerly CSNL 1/2)

Metal Foil Current Sensing Chip Resistor

Date: **July 21, 2015**
Component Weight (mg): **18.0000**

Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)

BOM Item	Material	CAS Number	Material Weight (mg)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (mg)	BOM Item % of Component
CM metal element	copper	7440-50-8	8.2663	459,240	86.00%	9.6120	53.40%
	manganese	7439-96-5	1.1534	64,080	12.00%		
	nickel	7440-02-0	0.1922	10,680	2.00%		
Terminal	copper	7440-50-8	3.96000	220,000	100.00%	3.9600	22.00%
Middle termination	nickel	7440-02-0	1.4400	80,000	100.00%	1.4400	8.00%
Termination plating	tin	7440-31-5	2.3400	130,000	100.00%	2.3400	13.00%
Over-coat	silicon resin	7631-86-9	0.3600	20,000	100.00%	0.3600	2.00%
Marking	epoxy resin	25068-38-6	0.14400	8,000	50.00%	0.2880	1.60%
	barium sulfate	7727-43-7	0.02016	1,120	7.00%		
	titanium dioxide	13463-67-7	0.06480	3,600	22.50%		
	ethyl acetate	112-15-2	0.04464	2,480	15.50%		
	2-methylimidazole	693-98-1	0.01440	800	5.00%		
Total Weight			18.0000				

* Weights are approximate



Material Declaration Data Sheet

CSNL2010 (Formerly CSNL 1)

Metal Foil Current Sensing Chip Resistor

Date: **July 21, 2015**
Component Weight (mg): **68.0000**

Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)

BOM Item	Material	CAS Number	Material Weight (mg)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (mg)	BOM Item % of Component
CM metal element	copper	7440-50-8	31.2283	459,240	86.00%	36.3120	53.40%
	manganese	7439-96-5	4.3574	64,080	12.00%		
	nickel	7440-02-0	0.7262	10,680	2.00%		
Terminal	copper	7440-50-8	14.96000	220,000	100.00%	14.9600	22.00%
Middle termination	nickel	7440-02-0	5.4400	80,000	100.00%	5.4400	8.00%
Termination plating	tin	7440-31-5	8.8400	130,000	100.00%	8.8400	13.00%
Over-coat	silicon resin	7631-86-9	1.3600	20,000	100.00%	1.3600	2.00%
Marking	epoxy resin	25068-38-6	0.54400	8,000	50.00%	1.0880	1.60%
	barium sulfate	7727-43-7	0.07616	1,120	7.00%		
	titanium dioxide	13463-67-7	0.24480	3,600	22.50%		
	ethyl acetate	112-15-2	0.16864	2,480	15.50%		
	2-methylimidazole	693-98-1	0.05440	800	5.00%		
Total Weight			68.0000				

* Weights are approximate



Material Declaration Data Sheet

CSNL2512 (Formerly CSNL 2)

Metal Foil Current Sensing Chip Resistor

Date: **July 21, 2015**
Component Weight (mg): **59.1300**

Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)

BOM Item	Material	CAS Number	Material Weight (mg)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (mg)	BOM Item % of Component
CM metal element	copper	7440-50-8	50.9677	861,960	88.00%	57.9178	97.95%
	manganese	7439-96-5	6.9501	117,540	12.00%		
Termination plating	tin	7440-31-5	0.5913	10,000	100.00%	0.5913	1.00%
Over-coat	barium sulfate	7727-43-7	0.1996	3,375	45.00%	0.4435	0.75%
	ethyl cellulose	9004-57-3	0.2217	3,750	50.00%		
	ethyl acetate	112-15-2	0.02217	375	5.00%		
Marking	talc	14807-96-6	0.07805	1,320	44.00%	0.1774	0.30%
	Ethyleneglycol monobutyl ether	111-76-2	0.0488	825	27.50%		
	titanium dioxide	13463-67-7	0.0169	285	9.50%		
	2-hydroxyethyl methacrylate	868-77-9	0.03370	570	19.00%		
Total Weight			59.1300				

* Weights are approximate