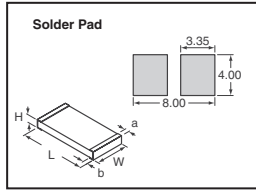




CSNL Series – Metal Foil Current Sensing Resistors



- Features:**
- Low inductance – typically less than 0.1nH
 - TCR down to $\pm 50\text{ppm}/^\circ\text{C}$
 - Dielectric Withstanding Voltage: 200V

Resistance Value Chart

CSNL1206		CSNL2010		CSNL2512	
Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
0.001 (1L00)	0.001 (1L00)	0.0005 (L500)	0.004 (4L00)	0.001 (1L00)	0.005 (5L00)
0.002 (2L00)	0.002 (2L00)	0.002 (2L00)	0.007 (7L00)	0.003 (3L00)	0.003 (3L00)
0.003 (3L00)	0.005 (5L00)	0.003 (3L00)			

Type	Size Code	Dimensions - mm					
		L	W	H	a	b	
CSNL1206	1206	3.20 ±0.25	1.60 ±0.1	0.6 ±0.2	0.98 ±0.38	0.98 ±0.38	
CSNL2010	2010	5.08 ±0.25	2.54 ±0.15	0.6 ±0.2	1.67 ±0.63	1.67 ±0.63	
CSNL2512 (0.00050)	2512	6.35 ±0.25	3.18 ±0.25	1.4 ±0.2	1.3 ±0.3	1.3 ±0.3	
CSNL2512 (0.0010)	2512	6.35 ±0.25	3.18 ±0.25	0.8 ±0.2	1.3 ±0.3	1.3 ±0.3	
CSNL2512 (0.0020)	2512	6.35 ±0.25	3.18 ±0.25	0.5 ±0.2	1.3 ±0.3	1.3 ±0.3	
CSNL2512 (0.0030)	2512	6.35 ±0.25	3.18 ±0.25	0.7 ±0.2	1.3 ±0.3	1.3 ±0.3	
CSNL2512 (0.0040)	2512	6.35 ±0.25	3.18 ±0.25	0.6 ±0.2	1.3 ±0.3	1.3 ±0.3	
CSNL2512 (0.0050)	2512	6.35 ±0.25	3.18 ±0.25	0.5 ±0.2	1.3 ±0.3	1.3 ±0.3	
CSNL2512 (0.0070)	2512	6.35 ±0.25	3.18 ±0.25	0.45 ±0.2	1.3 ±0.3	1.3 ±0.3	

Resistance Range (Ω)	Wattage	Tolerance	Digi-Key Part No. \$	Cut Tape Price Each			Digi-Key Part No. \$	Tape and Reel Pricing 2,000
				1	10	50		
0.001 – 0.003	1	1%	CSNL1206FT(Code)CT-ND	1.25	.89	.67	CSNL1206FT(Code)TR-ND	222.50/M
0.001 – 0.005	1.5	1%	CSNL2010FT(Code)CT-ND	1.25	.89	.67	CSNL2010FT(Code)TR-ND	222.50/M
0.0005	2	1%	CSNL2512FTL500CT-ND	1.19	1.08	.89	CSNL2512FTL500TR-ND	317.86/M
0.001 – 0.007	2	1%	CSNL2512FT(Code)CT-ND	1.25	.89	.67	CSNL2512FT(Code)TR-ND	222.50/M

§ For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

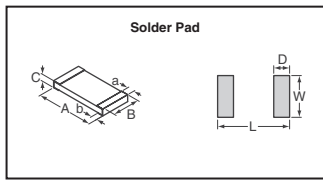
CSR/CSRN Series – Thick Film Current Sensing Resistors



- Features:**
- Power ratings to 3 Watts • Low inductance – less than 0.2nH typically

Resistance Value Chart

Type	Size Code	Dimensions – mm (maximum)							
		A	B	C	a	b	L	W	D
CSR0603	0603	1.600	0.800	0.450	0.300	0.300	2.10	1.10	0.70
CSR0805	0805	2.000	1.250	0.550	0.300	0.400	2.70	1.40	1.00
CSR1206	1206	3.20	1.803	0.66	0.814	0.66	4.00	2.00	1.80
CSRN2010	2010	5.156	2.692	0.712	0.915	0.762	6.35	3.68	1.40
CSRN2512	2512	6.40	3.225	0.686	0.889	0.762	8.00	4.00	1.40



Resistance Value Chart

NEW! CSR0603 NEW!

Value (Code)	Value (Code)	Value (Code)
0.02 (20L0)	0.075 (75L0)	0.3 (R300)
0.025 (25L0)	0.1 (R100)	0.5 (R500)
0.03 (30L0)	0.2 (R200)	1 (R100)
0.05 (50L0)	0.25 (R250)	

NEW! CSR0805 NEW!

Value (Code)	Value (Code)	Value (Code)
0.02 (20L0)	0.075 (75L0)	0.3 (R300)
0.025 (25L0)	0.1 (R100)	0.5 (R500)
0.03 (30L0)	0.2 (R200)	1 (R100)
0.05 (50L0)	0.25 (R250)	

CSR1206

Value (Code)	Value (Code)	Value (Code)
0.01 (10L0)	0.05 (50L0)	0.33 (R330)
0.012 (12L0)	0.075 (75L0)	0.5 (R500)
0.015 (15L0)	0.1 (R100)	0.75 (R750)
0.02 (20L0)	0.2 (R200)	1 (R100)
0.025 (25L0)	0.25 (R250)	
0.03 (30L0)	0.3 (R300)	

CSRN2010

Value (Code)	Value (Code)	Value (Code)
0.01 (10L0)	0.05 (50L0)	0.25 (R250)
0.015 (15L0)	0.06 (60L0)	0.3 (R300)
0.02 (20L0)	0.075 (75L0)	0.4 (R400)
0.025 (25L0)	0.1 (R100)	0.5 (R500)
0.03 (30L0)	0.15 (R150)	0.75 (R750)
0.04 (40L0)	0.2 (R200)	

CSRN2512

Value (Code)	Value (Code)	Value (Code)	Value (Code)
0.01 (10L0)	0.05 (50L0)	0.25 (R250)	0.68 (R680)
0.015 (15L0)	0.068 (68L0)	0.3 (R300)	0.75 (R750)
0.02 (20L0)	0.075 (75L0)	0.33 (R330)	
0.025 (25L0)	0.1 (R100)	0.4 (R400)	
0.03 (30L0)	0.15 (R150)	0.47 (R470)	
0.04 (40L0)	0.2 (R200)	0.5 (R500)	

Resistance Range (Ω)	Wattage	Tolerance	TCR	Digi-Key Part No. \$	Cut Tape Price Each			Digi-Key Part No. \$	Tape and Reel Pricing 1,000
					1	10	50		
0.02 – 0.03	.125	1%	± 300 ppm/°C	CSR0603FK(Code)CT-ND✓	.93	.65	.46	CSR0603FK(Code)TR-ND✓	133.84
0.05 – 0.075	.125	1%	± 300 ppm/°C	CSR0603FK(Code)CT-ND✓	1.00	.69	.42	CSR0603FK(Code)TR-ND✓	114.72
0.1 – 0.3	.125	1%	± 300 ppm/°C	CSR0603FK(Code)CT-ND✓	.67	.46	.28	CSR0603FK(Code)TR-ND✓	76.48
0.5 – 1	.125	1%	± 300 ppm/°C	CSR0603FK(Code)CT-ND✓	.53	.36	.21	CSR0603FK(Code)TR-ND✓	43.02
0.02 – 0.03	.250	1%	± 200 ppm/°C	CSR0805FK(Code)CT-ND✓	.93	.65	.46	CSR0805FK(Code)TR-ND✓	133.84
0.05	.250	1%	± 200 ppm/°C	CSR0805FK50L0CT-ND✓	1.34	.91	.55	CSR0805FK50L0TR-ND✓	152.95
0.075	.250	1%	± 200 ppm/°C	CSR0805FK75L0CT-ND✓	1.00	.69	.42	CSR0805FK75L0TR-ND✓	114.72
0.1 – 0.3	.250	1%	± 200 ppm/°C	CSR0805FK(Code)CT-ND✓	.67	.46	.28	CSR0805FK(Code)TR-ND✓	76.48
0.5 – 1	.250	1%	± 200 ppm/°C	CSR0805FK(Code)CT-ND✓	.53	.36	.21	CSR0805FK(Code)TR-ND✓	43.02
0.01 – 0.02	0.5	1%	± 100 ppm/°C	CSR1206FK(Code)CT-ND	.93	.65	.46	CSR1206FK(Code)TR-ND	133.84
0.025 – 0.05	0.5	1%	± 100 ppm/°C	CSR1206FK(Code)CT-ND	.81	.57	.41	CSR1206FK(Code)TR-ND	117.11
0.075 – 0.1	0.5	1%	± 100 ppm/°C	CSR1206FK(Code)CT-ND	1.00	.69	.42	CSR1206FK(Code)TR-ND	114.72
0.2 – 0.33	0.5	1%	± 100 ppm/°C	CSR1206FK(Code)CT-ND	.75	.52	.31	CSR1206FK(Code)TR-ND	86.04
0.5 – 1	0.5	1%	± 100 ppm/°C	CSR1206FK(Code)CT-ND	.65	.44	.26	CSR1206FK(Code)TR-ND	64.53
0.01 – 0.02	1	1%	± 250 ppm/°C	CSRN2010FK(Code)CT-ND	1.24	.87	.64	CSRN2010FK(Code)TR-ND	200.75
0.025 – 0.05	1	1%	± 250 ppm/°C	CSRN2010FK(Code)CT-ND	1.14	.80	.58	CSRN2010FK(Code)TR-ND	184.02
0.06 – 0.1	1	1%	± 250 ppm/°C	CSRN2010FK(Code)CT-ND	1.03	.73	.53	CSRN2010FK(Code)TR-ND	167.29
0.15 – 0.4	1	1%	± 250 ppm/°C	CSRN2010FK(Code)CT-ND	.93	.65	.46	CSRN2010FK(Code)TR-ND	133.84
0.5 – 0.75	1	1%	± 250 ppm/°C	CSRN2010FK(Code)CT-ND	1.09	.74	.45	CSRN2010FK(Code)TR-ND	124.28
0.01 – 0.02	2	1%	± 200 ppm/°C	CSRN2512FK(Code)CT-ND	1.25	.89	.67	CSRN2512FK(Code)TR-ND	230.03
0.025 – 0.05	2	1%	± 200 ppm/°C	CSRN2512FK(Code)CT-ND	1.14	.80	.58	CSRN2512FK(Code)TR-ND	184.02
0.068 – 0.1	2	1%	± 200 ppm/°C	CSRN2512FK(Code)CT-ND	1.03	.73	.53	CSRN2512FK(Code)TR-ND	167.29
0.15 – 0.47	2	1%	± 200 ppm/°C	CSRN2512FK(Code)CT-ND	1.05	.73	.52	CSRN2512FK(Code)TR-ND	150.56
0.5 – 0.75	2	1%	± 200 ppm/°C	CSRN2512FK(Code)CT-ND	.92	.63	.38	CSRN2512FK(Code)TR-ND	105.16

✓ **NEW!** § For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

CSKA Series Sample Kits



1/2 Watt 1206 1% Sample Kit 25 each of the following values:						1 Watt 2010 1% Sample Kit 25 each of the following values:						2 Watt 2512 1% Sample Kit 25 each of the following values:							
CSRF	CSNL	CSR				CSNL	CSRN				CSRF	CSNL	CSRN						
0.005	0.001	0.012	0.03	0.015	0.5	0.001	0.01	0.05	0.04	0.25	0.75	0.01	0.0005	0.007	0.01	0.05	0.04	0.25	0.47
0.01	0.002	0.015	0.05	0.2	0.75	0.002	0.02	0.075	0.06	0.3		05	0.001	0.002	0.02	0.075	0.068	0.3	0.5
	0.003	0.02	0.075	0.25		0.003	0.025	0.1	0.15	0.4			0.002	0.003	0.025	0.1	0.15	0.33	0.68
		0.025	0.1	0.3		0.005	0.03	0.015	0.2	0.5			0.003		0.03	0.015	0.2	0.4	0.75

Description	Digi-Key Part No.	Price Each
1/2 Watt 1206 1% Sample Kit, 25 each of 20 values	CSR1206FTKITKIT-ND	99.18
1 Watt 2010 1% Sample Kit, 25 each of 21 values	CSR2010FTKITKIT-ND	109.10
2 Watt 2512 1% Sample Kit, 25 each of 27 values	CSR2512FTKITKIT-ND	119.02

HPC Series – High Power Surface Mount Resistors



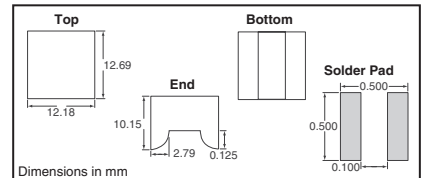
- Features:**
- Up to 12W with no external heat sinks • Non-inductive resistive element
 - Up to 50W for short duration

Electrical Specifications:

- Maximum Voltage: 200V • Temperature Coefficient: $\pm 150\text{ppm}/^\circ\text{C}$

Resistance Value Chart

Value (Code)	Value (Code)	Value (Code)
0.1 (R100)	12 (12R0)	100 (100R)
8.2 (8R20)	22 (22R0)	
10 (10R0)	47 (47R0)	



Resistance Range (Ω)	Wattage	Tolerance	Digi-Key Part No. \$	Cut Tape Price Each			Tape and Reel Pricing	
				1	10	50	200	1,200
0.1 – 100	5	5%	HPC12JT(Code)CT-ND	3.70	3.37	3.03	HPC12JT(Code)TR-ND	415.20 / 1430.75/M

§ For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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