

## CTTSMD2120F Series

From 1.0 $\mu$ H to 1,000 $\mu$ H



### CHARACTERISTICS

**Description:** High Current SMD Power Inductors

**Applications:** Input/output of DC/DC converters, Industrial electronics, Portable communications equipment, Camcorders, LCD TVs, Car radios

**Test Voltage:** 0.1V

**Reflow Soldering:** 245°C, 5 sec.

**Operating Temperature:** -55°C to +105°C

**Storage Temperature:** -55°C to +105°C

**Resistance to Soldering Heat:** 260°C, 10 sec. max.

**Rated Current:** See "Inductance vs. Current" table

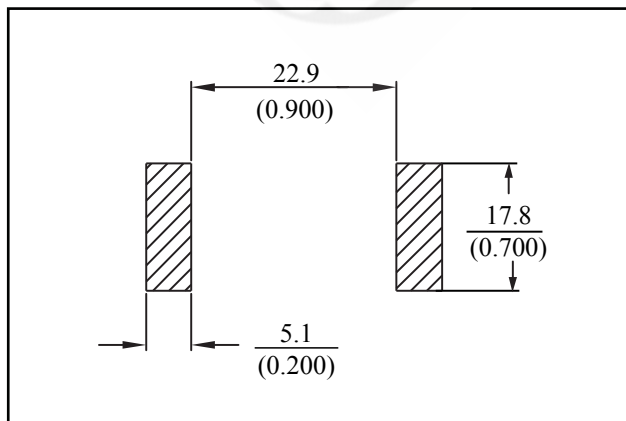
**Temperature Rise:** 30°C typical at IDC

**Materials:**

- Core: Iron
- Wire: Enameled copper
- Adhesive: Epoxy resin
- Terminal: 99.3%Sn/0.7%Cu

**Samples available. See website for ordering information.**

### PAD LAYOUT

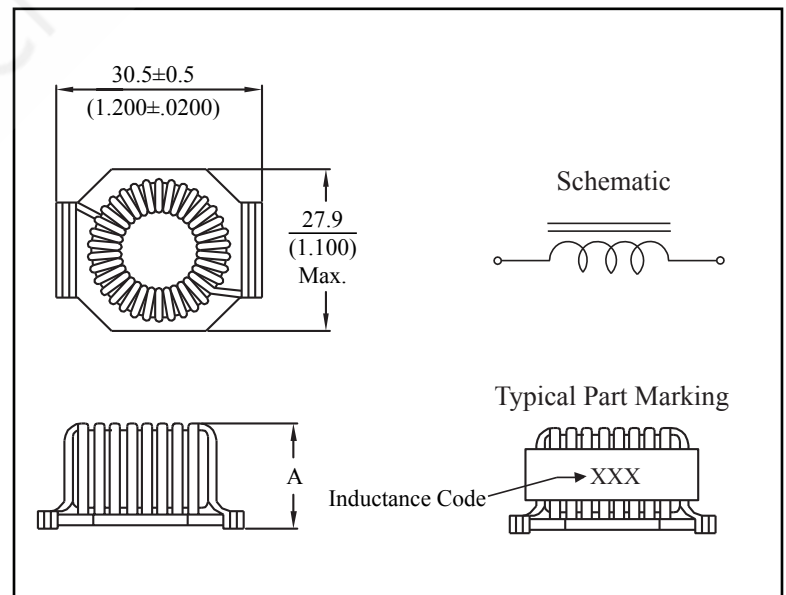


### SPECIFICATIONS

Part numbers indicate available inductance tolerance.  
K = 10%, M = 20%

Part Number	L( $\mu$ H) @1kHz	IDC (A)	DCR (m $\Omega$ ) Max.	Dim. A Max. mm/(in.)
CTTSMD2120F-1R0M	1.0	25.4	2	20.83/(0.82)
CTTSMD2120F-1R2M	1.2	25.4	2	20.83/(0.82)
CTTSMD2120F-1R5M	1.5	22.0	3	20.83/(0.82)
CTTSMD2120F-1R8M	1.8	22.0	3	20.83/(0.82)
CTTSMD2120F-2R2M	2.2	19.7	3	20.83/(0.82)
CTTSMD2120F-2R7M	2.7	19.7	3	20.83/(0.82)
CTTSMD2120F-3R3M	3.3	18.0	4	20.83/(0.82)
CTTSMD2120F-3R9M	3.9	18.0	4	20.83/(0.82)
CTTSMD2120F-4R7M	4.7	16.6	5	20.83/(0.82)
CTTSMD2120F-5R6M	5.6	15.6	5	20.83/(0.82)
CTTSMD2120F-6R8M	6.8	14.7	6	20.83/(0.82)
CTTSMD2120F-8R2M	8.2	14.7	6	20.83/(0.82)
CTTSMD2120F-100K	10	13.9	7	20.83/(0.82)
CTTSMD2120F-120K	12	12.7	8	20.83/(0.82)
CTTSMD2120F-150K	15	12.2	9	20.83/(0.82)
CTTSMD2120F-180K	18	11.8	9	20.83/(0.82)
CTTSMD2120F-220K	22	11.0	11	20.83/(0.82)
CTTSMD2120F-270K	27	10.4	12	20.83/(0.82)
CTTSMD2120F-330K	33	10.1	13	20.83/(0.82)
CTTSMD2120F-390K	39	9.6	14	20.83/(0.82)
CTTSMD2120F-470K	47	8.2	19	20.07/(0.79)
CTTSMD2120F-560K	56	7.9	21	20.07/(0.79)
CTTSMD2120F-680K	68	6.7	29	19.56/(0.77)
CTTSMD2120F-820K	82	6.4	32	22.10/(0.87)
CTTSMD2120F-101K	100	6.1	35	22.10/(0.87)
CTTSMD2120F-121K	120	5.8	39	22.10/(0.87)
CTTSMD2120F-151K	150	5.5	43	22.10/(0.87)
CTTSMD2120F-181K	180	5.3	47	21.08/(0.83)
CTTSMD2120F-221K	220	5.0	52	21.08/(0.83)
CTTSMD2120F-271K	270	4.2	72	20.32/(0.80)
CTTSMD2120F-331K	330	3.6	100	19.81/(0.78)
CTTSMD2120F-391K	390	3.5	108	21.59/(0.85)
CTTSMD2120F-471K	470	3.3	119	21.59/(0.85)
CTTSMD2120F-561K	560	3.2	130	21.59/(0.85)
CTTSMD2120F-681K	680	3.0	142	21.59/(0.85)
CTTSMD2120F-821K	820	2.9	157	21.59/(0.85)
CTTSMD2120F-102K	1000	2.5	215	20.83/(0.82)

### PHYSICAL DIMENSIONS



## INDUCTANCE VS. CURRENT

Part Number	L(μH)	IDC (A) to decrease L by 10%	IDC (A) to decrease L by 20%	IDC (A) to decrease L by 30%	IDC (A) to decrease L by 40%	IDC (A) to decrease L by 50%
CTTSMD2120F-1R0M	1.0	15.3	24.5	34.4	45.9	61.3
CTTSMD2120F-1R2M	1.2	17.4	27.9	39.2	52.2	69.7
CTTSMD2120F-1R5M	1.5	15.8	25.3	35.6	47.4	63.3
CTTSMD2120F-1R8M	1.8	14.6	23.4	32.9	43.8	58.5
CTTSMD2120F-2R2M	2.2	13.1	21.0	29.5	39.3	52.5
CTTSMD2120F-2R7M	2.7	11.7	18.7	26.3	35.1	46.9
CTTSMD2120F-3R3M	3.3	15.1	24.2	34.0	45.3	60.5
CTTSMD2120F-3R9M	3.9	9.70	15.5	21.8	29.1	38.9
CTTSMD2120F-4R7M	4.7	8.90	14.3	20.0	26.7	35.7
CTTSMD2120F-5R6M	5.6	8.10	13.0	18.2	24.3	32.4
CTTSMD2120F-6R8M	6.8	7.40	11.9	16.7	22.2	29.6
CTTSMD2120F-8R2M	8.2	6.70	10.7	15.1	20.1	26.8
CTTSMD2120F-100K	10	6.10	9.77	13.7	18.3	24.4
CTTSMD2120F-120K	12	5.60	8.97	12.6	16.8	22.4
CTTSMD2120F-150K	15	4.90	7.85	11.0	14.7	19.6
CTTSMD2120F-180K	18	4.60	7.37	10.4	13.8	18.4
CTTSMD2120F-220K	22	4.10	6.57	9.23	12.3	16.4
CTTSMD2120F-270K	27	3.70	5.93	8.33	11.1	14.8
CTTSMD2120F-330K	33	3.35	5.37	7.54	10.1	13.4
CTTSMD2120F-390K	39	3.10	4.97	6.98	9.30	12.4
CTTSMD2120F-470K	47	2.80	4.49	6.30	8.40	11.2
CTTSMD2120F-560K	56	2.55	4.09	5.74	7.65	10.2
CTTSMD2120F-680K	68	2.35	3.76	5.29	7.05	9.41
CTTSMD2120F-820K	82	2.15	3.44	4.84	6.45	8.61
CTTSMD2120F-101K	100	1.92	3.08	4.32	5.76	7.69
CTTSMD2120F-121K	120	1.75	2.80	3.94	5.25	7.01
CTTSMD2120F-151K	150	1.58	2.53	3.56	4.74	6.33
CTTSMD2120F-181K	180	1.43	2.29	3.22	4.29	5.73
CTTSMD2120F-221K	220	1.30	2.08	2.93	3.90	5.21
CTTSMD2120F-271K	270	1.18	1.89	2.66	3.54	4.73
CTTSMD2120F-331K	330	1.11	1.78	2.50	3.33	4.45
CTTSMD2120F-391K	390	0.97	1.55	2.18	2.91	3.89
CTTSMD2120F-471K	470	0.89	1.43	2.00	2.67	3.57
CTTSMD2120F-561K	560	0.81	1.30	1.82	2.43	3.24
CTTSMD2120F-681K	680	0.74	1.19	1.67	2.22	2.96
CTTSMD2120F-821K	820	0.67	1.07	1.51	2.01	2.68
CTTSMD2120F-102K	1000	0.61	0.98	1.37	1.83	2.44