

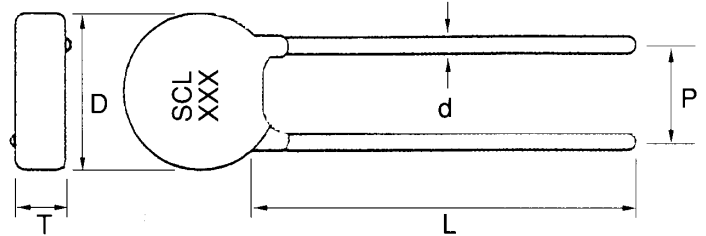
● SCL Series for Surge Current Limit

★ Part Number System

$$\frac{\text{SCL}}{\text{①}} - \frac{10}{\text{②}} \frac{3}{\text{③}} \frac{L}{\text{④}}$$

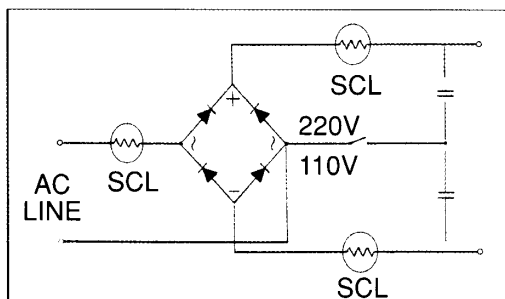
- ① Product Identifier
- ② Resistance at 25°C
10=10Ω, 2R5=2.5Ω
- ③ Rate Current
3=3A, 30=30A
- ④ Resistance Tolerance
K=10%, L=15%
M=20%, N=25%

★ Outline Drawing and Dimension



Disc	D (mm)	L (mm)	d (mm)	P (mm)	T (mm)
5φ	6.5 Max.	31.0 Min.	0.8±0.02	4.0±10%	5.0 Max.
8φ	9.5 Max.	31.0 Min.	0.8±0.02	5.0±10%	5.0 Max.
10φ	11.5 Max.	31.0 Min.	0.8±0.02	5.0±10%	5.0 Max.
13φ	14.5 Max.	30.0 Min.	0.8±0.02	7.5±10%	6.0 Max.
15φ	16.5 Max.	29.0 Min.	1.0±0.02	7.5±10%	6.0 Max.
20φ	21.5 Max.	26.0 Min.	1.0±0.02	7.5±10%	6.0 Max.
30φ	31.5 Max.	26.0 Min.	1.0±0.02	7.5±10%	6.0 Max.

★ Application Circuits



★ SCL NTC power thermistor circuit to switching power supply input source.

MAX. OPERATION CURRENT : 1A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-101	10	5	1.0	1126	15	17	100	170
SCL-201	20	8	1.0	1544	17	41	330	170
SCL-801	80	10	1.0	2236	17	53	330	170
SCL-1001	100	10	1.0	2318	17	45	330	170
SCL-1201	120	10	1.0	2406	19	54	330	170

MAX. OPERATION CURRENT : 2A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-042	4	8	2.0	441	17	31	470	170
SCL-052	5	5	2.0	429	14	17	100	170
SCL-082	8	8	2.0	520	16	36	470	170
SCL-102	10	8	2.0	542	17	38	470	170
SCL-122	12	10	2.0	512	18	50	470	170
SCL-152	15	8	2.0	548	15	38	330	170
SCL-162	15	10	2.0	604	18	55	470	170
SCL-202	20	10	2.0	646	17	54	470	170

MAX. OPERATION CURRENT : 3A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-053	5	8	3.0	261	17	36	470	170
SCL-063	6	8	3.0	283	17	38	470	170
SCL-083	8	10	3.0	278	17	43	470	170
SCL-103	10	10	3.0	339	17	38	470	170
SCL-123	12	10	3.0	301	18	50	470	170
SCL-153	15	13	3.0	343	18	66	680	200
SCL-163	16	13	3.0	348	16	68	680	200
SCL-203	20	13	3.0	410	20	76	680	200
SCL-253	25	15	3.0	425	21	76	820	200
SCL-303	30	15	3.0	461	20	90	820	200
SCL-403	40	15	3.0	511	22	83	820	200
SCL-473	47	15	3.0	501	20	77	820	200

MAX. OPERATION CURRENT : 4A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-034	3	10	4.0	156	18	45	680	170
SCL-044	4	10	4.0	161	16	40	680	170
SCL-054	5	10	4.0	180	17	33	560	170
SCL-084	8	13	4.0	206	17	65	680	200
SCL-104	10	13	4.0	217	17	66	680	200
SCL-124	12	13	4.0	217	17	66	680	200
SCL-164	16	15	4.0	261	19	79	820	200
SCL-204	20	15	4.0	283	18	90	820	200

MAX. OPERATION CURRENT : 5A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-2R55	2.5	10	5.0	120	18	46	680	170
SCL-035	3	10	5.0	119	18	45	680	170
SCL-3R95	3.9	15	5.0	138	26	66	820	200
SCL-055	5	13	5.0	166	18	75	820	200
SCL-065	6	15	5.0	159	20	74	820	200
SCL-075	7	15	5.0	161	20	79	820	200
SCL-105	10	15	5.0	178	20	79	820	200

MAX. OPERATION CURRENT : 6A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-2R56	2.5	13	6.0	94	17	48	820	200
SCL-046	4	15	6.0	117	20	62	1000	200
SCL-056	5	15	6.0	121	20	66	1000	200
SCL-106	10	20	6.0	173	32	100	1500	200
SCL-166	16	15	6.0	190	22	86	820	200
SCL-206	20	20	6.0	198	31	100	1500	200

MAX. OPERATION CURRENT : 7A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-1R37	1.3	13	7.0	70	17	49	680	200
SCL-037	3	15	7.0	91	21	73	1000	200
SCL-057	5	15	7.0	98	20	65	1000	200

MAX. OPERATION CURRENT : 8A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-0R78	0.7	20	8.0	76	37	43	1800	200
SCL-1R38	1.3	15	8.0	64	21	59	1000	200
SCL-1R58	1.5	15	8.0	62	21	66	1000	200
SCL-2R58	2.5	15	8.0	75	20	63	1000	200
SCL-048	4	15	8.0	87	27	76	1000	200
SCL-058	5	20	8.0	97	32	100	1500	200
SCL-078	7	15	8.0	108	28	57	1000	200
SCL-108	10	20	8.0	111	32	114	1500	200

MAX. OPERATION CURRENT : 10A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-0110	1	20	10	37	27	108	1800	200
SCL-0510	5	20	10	72	34	117	1800	270
SCL-1010	10	20	10	77	30	155	1500	270

MAX. OPERATION CURRENT : 15A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-0R715	0.7	20	15	35	32	161	1800	270
SCL-2R515	2.5	20	15	45	39	145	1800	270
SCL-0515	5	30	15	39	37	319	3000	270
SCL-1015	10	30	15	43	30	338	3000	270

MAX. OPERATION CURRENT : 20A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-0120	1	20	20	20	25	173	1800	270
SCL-2R520	2.5	30	20	20	30	145	3000	270

MAX. OPERATION CURRENT : 25A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-0125	1	30	25	35	53	213	3000	270

MAX. OPERATION CURRENT : 30A SERIES

Part No.	No load Resistance at 25°C (Ω)	Disk Dimension (φ)	Max. Permissible current at 25°C (A)	(25°C Ambient) approx. resistance at max. current (mΩ)	Thermal dissipation constant (mW/°C)	Thermal time constant (sec.)	Load Capacitance (μf)	Max. Working Temperature (°C)
SCL-0R530	0.5	30	30	8	65	164	3000	270