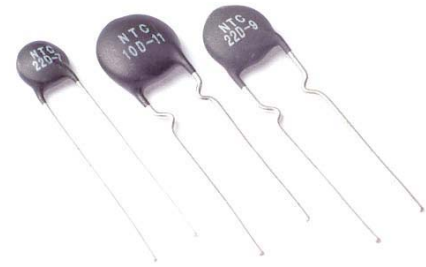


Features

1. SC series in the form of radial resin coated form.
2. Small dimension, powerful, strong in inrush current limiting.
3. Fast feedback.
4. large material constant, lower residue resistance.
5. Long life, high reliability.
6. Complete part, wide operation range.
7. Operating temperature -55~+200 °C



Application

1. Conversion power, switch mode power supply, UPS power.
2. Energy saving lights, ballast.
3. Electronic circuit, power supply circuit.

Selection Principle

1. Maximum operating current > Actual operating current in the power loop
2. Rated zero power resistance at 25C

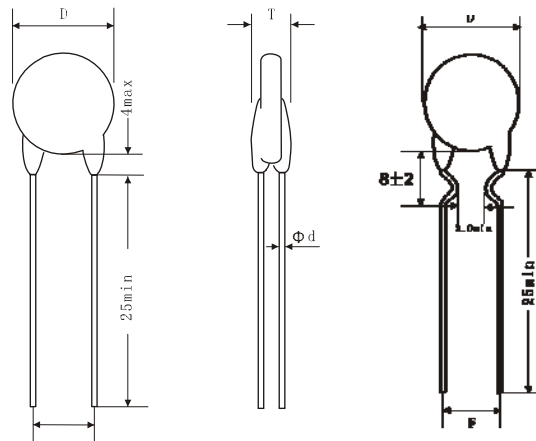
$$R \geq \frac{\sqrt{2}E}{I_m}$$

of which, E: loop voltage, I_m: Surge current

For conversion power, reversion power, switch power, UPS power, I_m=100 times operating current

For filament, heater, I_m =30 times operating current

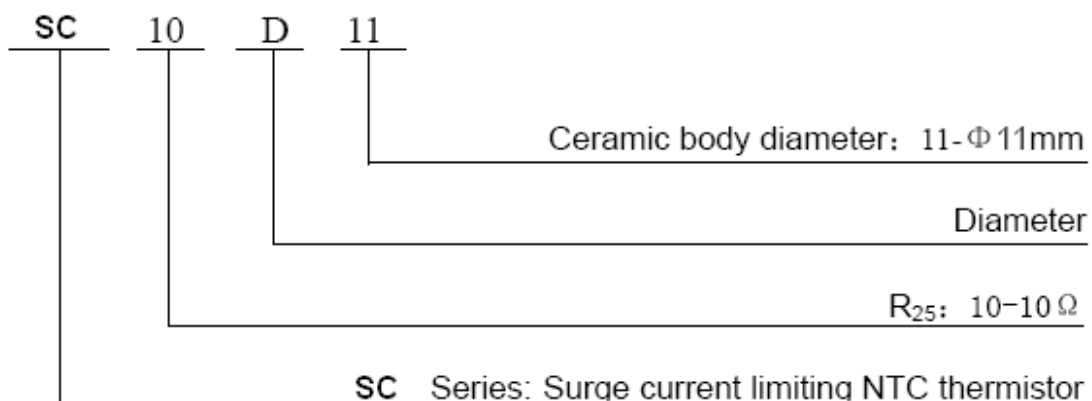
Outlook and Dimension (Unit: mm)



Straight lead type

Inner kinked lead type

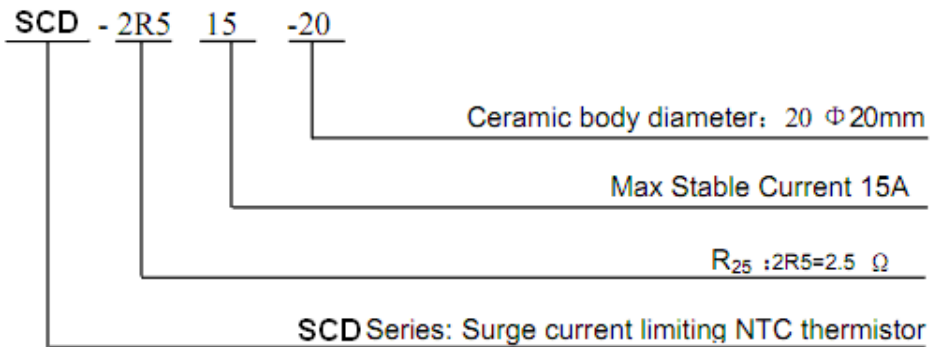
Marking of Part Number



Data Sheet

Part Number	Resistance @25°C R ₂₅ (Ω)	Max. Stable Current (A)	Approx. Resistance at max. current (Ω)	Dissipation Factor (mW/°C)	Thermal Time Constant (S)	Operating Temperature (°C)	Dimension (mm)			
							D±2	Tmax	F±1	Φd
SC-5D5	5	1	0.353	6	20	-55~+200	6.5	5	5/2.5	0.6/0.45
SC-10D5	10	0.7	0.771	6	20		6.5	5	5/2.5	0.6/0.45
SC-60D5	60	0.5	1.878	6	18		6.5	5	5/2.5	0.6/0.45
SC-200D5	200	0.1	6.259	6	18		6.5	5	5/2.5	0.6/0.45
SC-5D7	5	2	0.283	10	30		8.5	5	5	0.6
SC-8D7	8	1	0.539	9	28		8.5	5	5	0.6
SC-10D7	10	1	0.616	9	27		8.5	5	5	0.6
SC-22D7	22	0.6	1.108	9	27		8.5	5	5	0.6
SC-33D7	33	0.5	1.485	10	28		8.5	5	5	0.6
SC-200D7	200	0.2	6.233	11	28		8.5	5	5	0.6
SC-3D9	3	4	0.120	11	35		10.5	5.5	7.5/5	0.8/0.6
SC-5D9	5	3	0.210	11	34		10.5	5.5	7.5/5	0.8/0.6
SC-8D9	8	2	0.400	11	32		10.5	5.5	7.5/5	0.8/0.6
SC-10D9	10	2	0.458	11	32		10.5	5.5	7.5/5	0.8/0.6
SC-16D9	16	1	0.802	11	31		10.5	5.5	7.5/5	0.8/0.6
SC-20D9	20	1	0.864	11	30		10.5	5.5	7.5/5	0.8/0.6
SC-22D9	22	1	0.950	11	30		10.5	5.5	7.5/5	0.8/0.6
SC-33D9	33	1	1.124	11	30		10.5	5.5	7.5/5	0.8/0.6
SC-60D9	60	0.8	1.502	11	30		10.5	5.5	7.5/5	0.8/0.6
SC-200D9	200	0.5	5.007	11	32		10.5	5.5	7.5/5	0.8/0.6
SC-2.5D11	2.5	5	0.095	13	43		12.5	5.5	7.5/5	0.8/0.6
SC-5D11	5	4	0.156	13	45		12.5	5.5	7.5/5	0.8/0.6
SC-8D11	8	3	0.255	14	47		12.5	5.5	7.5/5	0.8/0.6
SC-10D11	10	3	0.275	14	47		12.5	5.5	7.5/5	0.8/0.6
SC-16D11	16	2	0.470	14	50		12.5	5.5	7.5/5	0.8/0.6
SC-22D11	22	2	0.563	15	52		12.5	5.5	7.5/5	0.8/0.6
SC-33D11	33	1.5	0.734	15	52		12.5	5.5	7.5/5	0.8/0.6
SC-60D11	60	1.5	1.215	15	52		12.5	5.5	7.5/5	0.8/0.6
SC-1.3D13	1.3	7	0.062	13	60		14.5	6	7.5	0.8
SC-1.5D13	1.5	7	0.073	13	60		14.5	6	7.5	0.8
SC-2.5D13	2.5	6	0.088	13	60		14.5	6	7.5	0.8
SC-3D13	3	6	0.092	14	60		14.5	6	7.5	0.8
SC-5D13	5	5	0.125	15	68		14.5	6	7.5	0.8
SC-8D13	8	4	0.194	15	60	14.5	6	7.5	0.8	
SC-10D13	10	4	0.206	15	65	14.5	6	7.5	0.8	
SC-15D13	15	3	0.335	16	60	14.5	6	7.5	0.8	
SC-16D13	16	3	0.338	16	60	14.5	6	7.5	0.8	
SC-47D13	47	2	0.810	17	65	14.5	6	7.5	0.8	
SC-1.3D15	1.3	8	0.048	18	68	16.5	6	10/7.5	0.8	

SC-1.5D15	1.5	8	0.052	19	69	16.5	6	10/7.5	0.8
SC-3D15	3	7	0.075	18	76	16.5	6	10/7.5	0.8
SC-5D15	5	6	0.112	20	76	16.5	6	10/7.5	0.8
SC-8D15	8	5	0.178	20	80	16.5	6	10/7.5	0.8
SC-10D15	10	5	0.180	20	75	16.5	6	10/7.5	0.8
SC-15D15	15	4	0.268	21	85	16.5	6	10/7.5	0.8
SC-16D15	16	4	0.276	21	70	16.5	6	10/7.5	0.8
SC-47D15	47	3	0.680	21	86	16.5	6	10/7.5	0.8
SC-0.7D20	0.7	12	0.018	25	89	21.5	7	10/7.5	1.0
SC-1.3D20	1.3	9	0.037	24	88	21.5	7	10/7.5	1.0
SC-3D20	3	8	0.055	24	88	21.5	7	10/7.5	1.0
SC-5D20	5	7	0.087	23	87	21.5	7	10/7.5	1.0
SC-8D20	8	6	0.142	25	105	21.5	7	10/7.5	1.0
SC-0.7D25	0.7	13	0.014	30	120	26.5	8	10	1.0
SC-1.5D25	1.5	10	0.027	30	121	26.5	8	10	1.0
SC-3D25	3	9	0.044	32	124	26.5	8	10	1.0
SC-5D25	5	8	0.070	32	125	26.5	8	10	1.0



Part Number	Resistance @25°C R ₂₅ (Ω)	Max. Stable Current (A)	Approx. Resistance at max. current (Ω)	Dissipation Factor (mW/°C)	Thermal Time Constant (S)	Operating Temperature (°C)	Dimension (mm)			
							D±2	Tmax	F±1	Φd
SCD-2R58	2.5	8	0.086	≥22	≤75	-55~+200	17.5	6	7.5	0.8
SCD-1R310	1.3	10	0.034				17.5	6	7.5	0.8
SCD-1R510	1.5	10	0.036				17.5	6	7.5	0.8
SCD-2R59.5	2.5	9.5	0.044				17.5	6	7.5	0.8
SCD-3R09	3.0	9	0.046				17.5	6	7.5	0.8
SCD-5R08	5.0	8	0.058				17.5	6	7.5	0.8
SCD-6R07	6.0	7	0.069				17.5	6	7.5	0.8
SCD-7R07	7.0	7	0.078				17.5	6	7.5	0.8
SCD-8R07	8.0	7	0.084				17.5	6	7.5	0.8
SCD-10R07	10	7	0.098				17.5	6	7.5	0.8
SCD-12R06	12	6	0.116				17.5	6	7.5	0.8
SCD-15R06	15	6	0.125				17.5	6	7.5	0.8
SCD-16R06	16	6	0.129				17.5	6	7.5	0.8
SCD-20R06	20	6	0.136				17.5	6	7.5	0.8
SCD-30R05	30	6	0.165				17.5	6	7.5	0.8
SCD-47R04	47	4	0.257				17.5	6	7.5	0.8

SCD-120R02.5	120	2.5	0.652			17.5	6	7.5	0.8
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Part Number	Resistance @25°C R ₂₅ (Ω)	Max. Stable Current (A)	Approx. Resistance at max. current (Ω)	Dissipation Factor (mW/°C)	Thermal Time Constant (S)	Operating Temperature (°C)	Dimension (mm)			
							D±2	Tmax	F±1	Φd
SCD-0R716	0.7	16	0.026	≥28	≤110	-55~+200	22.5	7	10	1.0
SCD-1R016	1.0	16	0.027				22.5	7	10	1.0
SCD-1R016	1.0	20	0.023				22.5	7	10	1.0
SCD-1R515	1.5	15	0.030				22.5	7	10	1.0
SCD-2R014	2.0	14	0.035				22.5	7	10	1.0
SCD-2R513	2.5	13	0.038				22.5	7	10	1.0
SCD-2R515	2.5	15	0.033				22.5	7	10	1.0
SCD-3R012	3.0	12	0.040				22.5	7	10	1.0
SCD-4R012	4.0	12	0.043				22.5	7	10	1.0
SCD-4R712	4.7	12	0.046				22.5	7	10	1.0
SCD-5R012	5.0	12	0.047				22.5	7	10	1.0
SCD-6R011	6.0	11	0.052				22.5	7	10	1.0
SCD-6R810	6.8	10	0.055				22.5	7	10	1.0
SCD-7R09	7.0	9	0.056				22.5	7	10	1.0
SCD-7R010	7.0	10	0.057				22.5	7	10	1.0
SCD-8R09	8.0	9	0.058				22.5	7	10	1.0
SCD-10R08	10	8	0.085				22.5	7	10	1.0
SCD-12R7.5	12	7.5	0.098				22.5	7	10	1.0
SCD-15R07	15	7	0.112				22.5	7	10	1.0
SCD-18R07	18	7	0.123				22.5	7	10	1.0
SCD-20R07	20	7	0.132	22.5	7	10	1.0			

Part Number	Resistance @25°C R ₂₅ (Ω)	Max. Stable Current (A)	Approx. Resistance at max. current (Ω)	Dissipation Factor (mW/°C)	Thermal Time Constant (S)	Operating Temperature (°C)	Dimension (mm)			
							D±2	Tmax	F±1	Φd
SCD-0R522	0.5	22	0.017	≥30	≤130	-55~+200	29	8	10	1.0
SCD-0R722	0.7	22	0.018				29	8	10	1.0
SCD-1R020	1	20	0.021				29	8	10	1.0
SCD-1R519	1.5	19	0.024				29	8	10	1.0
SCD-2R018	2	18	0.026				29	8	10	1.0
SCD-2R516	2.5	16	0.029				29	8	10	1.0
SCD-3R015.5	3	15.5	0.032				29	8	10	1.0
SCD-4R015	4	15	0.039				29	8	10	1.0
SCD-4R714	4.7	14	0.044				29	8	10	1.0
SCD-5R014	5	14	0.047				29	8	10	1.0
SCD-6R812	6.8	12	0.061				29	8	10	1.0
SCD-7R011	7	11	0.064				29	8	10	1.0
SCD-8R010	8	10	0.079				29	8	10	1.0
SCD-10R010	10	10	0.084				29	8	10	1.0
SCD-12R09	12	9	0.102				29	8	10	1.0

SCD-15R09	15	9	0.117				29	8	10	1.0
SCD-18R09	18	9	0.125				29	8	10	1.0
SCD-20R08	20	8	0.132				29	8	10	1.0

Part Number	Resistance @25°C R ₂₅ (Ω)	Max. Stable Current (A)	Approx. Resistance at max. current (Ω)	Dissipation Factor (mW/°C)	Thermal Time Constant (S)	Operating Temperature (°C)	Dimension (mm)			
							D±2	Tmax	F±1	Φd
SCD-0R530	0.5	30	0.013	≥40	≤190	-55~+200	36	8.5	18	1.6
SCD-1R030	1	30	0.014				36	8.5	18	1.6
SCD-1R525	1.5	25	0.016				36	8.5	18	1.6
SCD-2R023	2	23	0.019				36	8.5	18	1.6
SCD-2R520	2.5	20	0.023				36	8.5	18	1.6
SCD-3R019.5	3	19.5	0.026				36	8.5	18	1.6
SCD-4R019	4	19	0.031				36	8.5	18	1.6
SCD-4R718	4.7	18	0.035				36	8.5	18	1.6
SCD-5R017	5	17	0.037				36	8.5	18	1.6
SCD-6R816	6.8	16	0.043				36	8.5	18	1.6
SCD-7R015	7	15	0.044				36	8.5	18	1.6
SCD-8R014	8	14	0.049				36	8.5	18	1.6
SCD-10R013	10	13	0.056				36	8.5	18	1.6
SCD-12R012	12	12	0.067				36	8.5	18	1.6
SCD-15R11	15	11	0.078				36	8.5	18	1.6
SCD-18R10	18	10	0.092				36	8.5	18	1.6
SCD-20R09	20	9	0.113				36	8.5	18	1.6

Part Number	Resistance @25°C R ₂₅ (Ω)	Max. Stable Current (A)	Approx. Resistance at max. current (Ω)	Dissipation Factor (mW/°C)	Thermal Time Constant (S)	Operating Temperature (°C)	Dimension (mm)			
							D±2	Tmax	F±1	Φd
SCD-0R532	0.5	32	0.01	≥55	≤280	-55~+200	41	10	18	2.0
SCD-1R032	1	32	0.011				41	10	18	2.0
SCD-1R528	1.5	28	0.013				41	10	18	2.0
SCD-2R025	2	25	0.017				41	10	18	2.0
SCD-2R523	2.5	23	0.020				41	10	18	2.0
SCD-3R022	3	22	0.023				41	10	18	2.0
SCD-4R021	4	21	0.026				41	10	18	2.0
SCD-4R720	4.7	20	0.029				41	10	18	2.0
SCD-5R019	5	19	0.030				41	10	18	2.0
SCD-6R818	6.8	16	0.035				41	10	18	2.0
SCD-7R015	7	17	0.037				41	10	18	2.0
SCD-8R016	8	16	0.041				41	10	18	2.0
SCD-10R015	10	15	0.045				41	10	18	2.0
SCD-12R014	12	14	0.051				41	10	18	2.0
SCD-15R13	15	13	0.060				41	10	18	2.0
SCD-18R11	18	11	0.072				41	10	18	2.0
SCD-20R10	20	10	0.089				41	10	18	2.0