

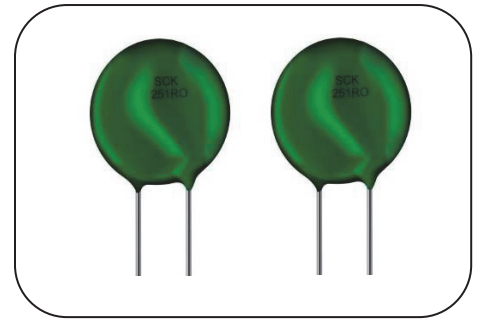
NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ Features

1. RoHS & Halogen Free (HF) compliant
2. Body size: $\Phi 5\text{mm} \sim \Phi 30\text{mm}$
3. Radial lead resin coated
4. High power rating
5. Wide resistance range
6. Cost effective
7. Operating temperature range:
 $\Phi 5\text{mm}$: $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$
 $\Phi 8 \sim \Phi 10\text{mm}$: $-40^{\circ}\text{C} \sim +170^{\circ}\text{C}$
 $\Phi 13\text{mm} \sim \Phi 30\text{mm}$: $-40^{\circ}\text{C} \sim +200^{\circ}\text{C}$
8. Agency recognition: UL / cUL / TUV / CSA / CQC



■ Recommended Applications

1. Switch mode power supply
2. Electric motor
3. Transformer
4. Adapter
5. Projector
6. Halogen lamp
7. LED driver circuit

■ Part Number Code

● $\Phi 5\text{mm} \sim \Phi 15\text{mm}$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Product Type		Body Size		Zero Power Resistance at 25°C (R₂₅)		Max Steady State Current at 25°C		Tolerance of R₂₅		Appearance		Optional Suffix			
SCK	THINKING NTC Thermistor SCK Series	05	$\Phi 5\text{mm}$	0R5	0.5 Ω	X3	0.3A	L	$\pm 15\%$	S	Straight lead	Y RoHS & HF Compliant			
		08	$\Phi 8\text{mm}$	2R5	2.5 Ω	2X	2.5A	M	$\pm 20\%$	F	Y kink lead				
		13	$\Phi 13\text{mm}$	08	8 Ω	8	8A	N	$\pm 25\%$	T	L kink lead				
		15	$\Phi 15\text{mm}$	20	20 Ω	10	10A								
				120	120 Ω										

● $\Phi 20\text{mm} \sim \Phi 30\text{mm}$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Product Type		Body Size		Zero Power Resistance at 25°C (R₂₅)		Tolerance of R₂₅		Appearance		Packaging		Optional Suffix		
SCK	THINKING NTC Thermistor SCK Series	20	$\Phi 20\text{mm}$	$R_{25} < 10\Omega$ 0R7:0.7 Ω 2R5:2.5 Ω	$R_{25} \geq 10\Omega$ 100:10 Ω 470:47 Ω 471:470 Ω	L $\pm 15\%$ M $\pm 20\%$ N $\pm 25\%$		S Straight lead F Y kink lead T L kink lead		B Bulk		Y	RoHS & HF Compliant	
		25	$\Phi 25\text{mm}$									H	RoHS & HF Compliant (For SCK25 and SCK30 only)	
		30	$\Phi 30\text{mm}$											

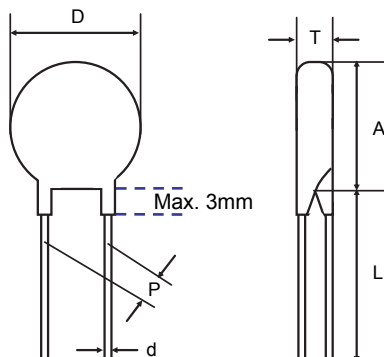
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■ Structure and Dimensions

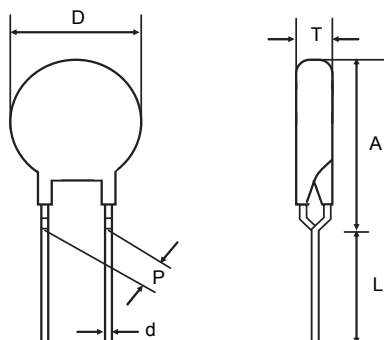
S Type (Straight lead)



(Unit: mm)

Series	Dmax.	P.	d	Amax.	Lmin.	Tmax.
SCK05	6.5	4±0.6	0.8±0.02	6.5	31	5
SCK08	9.5	5±0.8	0.8±0.02	9.5	31	5
SCK10	11.5	5±0.8	0.8±0.02	11.5	31	5
SCK13	14.5	7.5±1	0.8±0.02	14.5	30	6
SCK15	16.5	7.5±1	1.0±0.02	16.5	29	6
SCK20	21.5	7.5±1	1.0±0.02	21.5	26	6
SCK25	29	7.5±1	1.0±0.02	29.0	25	7
SCK30	36	7.5±1	1.0±0.02	36.0	23	8

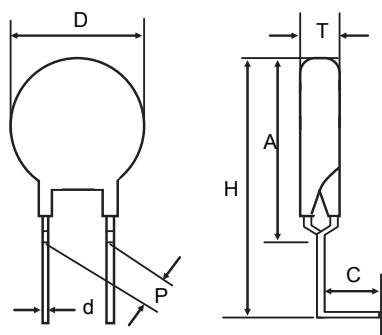
F Type (Y kink lead)



(Unit: mm)

Series	Dmax.	P	d	Amax.	Lmin.	Tmax.
SCK05	6.5	4±0.6	0.8±0.02	11.0	29	5
SCK08	9.5	5±0.8	0.8±0.02	13.0	29	5
SCK10	11.5	5±0.8	0.8±0.02	15.0	29	5
SCK13	14.5	7.5±1	0.8±0.02	17.5	27	6
SCK15	16.5	7.5±1	1±0.02	19.0	26	6
SCK20	21.5	7.5±1	1±0.02	24.5	25	6
SCK25	29	7.5±1	1±0.02	35.0	22	7
SCK30	36	7.5±1	1±0.02	42.0	22	8

T Type (L kink lead)



(Unit: mm)

Series	Dmax.	P	d	Amax.	Hmax.	C.	Tmax.
SCK05	6.5	4±0.6	0.8±0.02	11.0	15.5	4.0±1	5
SCK08	9.5	5±0.8	0.8±0.02	13.0	17.5	4.0±1	5
SCK10	11.5	5±0.8	0.8±0.02	15.0	19.5	4.0±1	5
SCK13	14.5	7.5±1	0.8±0.02	17.5	21.5	4.0±1	6
SCK15	16.5	7.5±1	1±0.02	19.0	23.5	4.0±1	6
SCK20	21.5	7.5±1	1±0.02	24.5	28.5	4.0±1	6

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Power Thermistor for Limiting Inrush Current



■ Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Max. Current at 25°C	Residual Resistance at 25°C I _{max}	Recommend Capacitance @240Vac	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range
	R ₂₅ (Ω)	I _{max} (A)	R _{I_{max}} (Ω)	C _{th} (μF)	P _{max} (W)	δ(mW/°C)	τ (Sec.)	T _L ~T _U (°C)
SCK05052□	5	2	0.429	100	1.8	Approx. 15	Approx. 17	-40 ~ +150
SCK05081□	8	1	1.089	68				
SCK05101□	10	1	1.126	100				
SCK05121□	12	1	1.184	68				
SCK0520X3□	20	0.3	5.560	100				
SCK08042□	4	2	0.441	220	2.3	Approx. 16	Approx. 38	-40 ~ +170
SCK084R72□	4.7	2	0.445	220				
SCK08053□	5	3	0.261	220				
SCK08063□	6	3	0.283	220				
SCK08073□	7	3	0.287	220				
SCK08082□	8	2	0.520	220				
SCK08102□	10	2	0.542	220				
SCK08152□	15	2	0.548	100				
SCK08201□	20	1	1.544	100				
SCK0830X□	30	0.5	4.094	100				
SCK10015□	1	5	0.091	470	2.4	Approx. 17	Approx. 43	-40 ~ +170
SCK101R35□	1.3	5	0.095	330				
SCK101R55□	1.5	5	0.101	330				
SCK102R55A□	2.5	5	0.120	470				
SCK10035□	3	5	0.127	560				
SCK10044□	4	4	0.161	560				
SCK10054□	5	4	0.180	470				
SCK106R83□	6.8	3	0.270	330				
SCK10083□	8	3	0.278	330				
SCK10103□	10	3	0.297	330				
SCK10123□	12	3	0.301	470				
SCK10133□	13	3	0.356	330				
SCK10152X□	15	2.5	0.442	330				
SCK10162X□	16	2.5	0.471	330				
SCK10202□	20	2	0.646	330				
SCK10222□	22	2	0.659	220				
SCK10252□	25	2	0.674	330				
SCK10302□	30	2	0.700	330				
SCK10472□	47	2	0.720	330				
SCK10502□	50	2	0.813	330				
SCK10801□	80	1	2.236	220				
SCK101001□	100	1	2.318	200				
SCK101201□	120	1	2.406	200				

Note 1: □ = Tolerance of R₂₅

Note 2: Special specifications are available upon request.

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■ Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Max. Current at 25°C	Residual Resistance at 25°C I _{max}	Recommend Capacitance @240Vac	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range
	R ₂₅ (Ω)	I _{max} (A)	R _{I_{max}} (Ω)	C _{th} (μF)	P _{max} (W)	δ(mW/°C)	τ (Sec.)	T _L ~T _U (°C)
SCK13013□	1	3	0.174	560	3.1	Approx. 18	Approx. 66	-40 ~ +200
SCK131R37□	1.3	7	0.070	470				
SCK132R56□	2.5	6	0.094	560				
SCK13045□	4	5	0.132	560				
SCK134R74□	4.7	4	0.168	560				
SCK13055□	5	5	0.166	560				
SCK13074□	7	4	0.184	470				
SCK13084□	8	4	0.206	470				
SCK13104□	10	4	0.217	470				
SCK13124□	12	4	0.230	560				
SCK13153□	15	3	0.343	560				
SCK13163□	16	3	0.348	560				
SCK13183□	18	3	0.365	560				
SCK13203□	20	3	0.410	470				
SCK150R78A□	0.7	8	0.051	680	3.6	Approx. 21	Approx. 75	-40 ~ +200
SCK15018□	1	8	0.054	680				
SCK151R38□	1.3	8	0.064	680				
SCK151R58□	1.5	8	0.068	800				
SCK15028□	2	8	0.078	680				
SCK152R58□	2.5	8	0.086	680				
SCK15037□	3	7	0.091	820				
SCK15046□	4	6	0.117	800				
SCK15056□	5	6	0.121	820				
SCK15065□	6	5	0.159	680				
SCK15075□	7	5	0.161	820				
SCK15085□	8	5	0.165	680				
SCK15105□	10	5	0.178	820				
SCK15125□	12	5	0.185	680				
SCK15154□	15	4	0.261	820				
SCK15164□	16	4	0.265	820				
SCK15184□	18	4	0.273	680				
SCK15204□	20	4	0.283	820				
SCK15224□	22	4	0.308	560				
SCK15253□	25	3	0.425	680				
SCK15303□	30	3	0.461	680				
SCK15333□	33	3	0.484	560				
SCK15403□	40	3	0.511	680				
SCK15473□	47	3	0.517	680				
SCK15802X□	80	2.5	0.693	560				
SCK151202□	120	2	1.010	560				

Note 1: □ = Tolerance of R₂₅

Note 2: Special specifications are available upon request.

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■ Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Max. Current at 25°C	Residual Resistance at 25°C I _{max}	Recommend Capacitance @240Vac	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range
	R ₂₅ (Ω)	I _{max} (A)	R _{I_{max}} (Ω)	C _{th} (μF)	P _{max} (W)	δ(mW/°C)	τ (Sec.)	T _L ~T _U (°C)
SCK200R7□	0.7	15	0.035	1000	4.9	Approx. 28	Approx. 113	-40 ~ +200
SCK201R0□	1	13	0.034					
SCK201R5□	1.5	10.5	0.041					
SCK202R0□	2	10	0.062					
SCK202R5□	2.5	9	0.083					
SCK203R0□	3	8.5	0.078					
SCK204R0□	4	8	0.080					
SCK204R7□	4.7	7.5	0.114					
SCK205R0□	5	7.5	0.118					
SCK206R0□	6	7	0.120					
SCK206R8□	6.8	6.5	0.130					
SCK207R0□	7	6.5	0.132					
SCK208R0□	8	6	0.161					
SCK20100□	10	5.5	0.196					
SCK20120□	12	5	0.197					
SCK20130□	13	5	0.213					
SCK20150□	15	4.5	0.258					
SCK20160□	16	4.5	0.276					
SCK20180□	18	4	0.280					
SCK20200□	20	4	0.306					
SCK251R0□	1	20	0.020	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200
SCK251R5□	1.5	18.5	0.023					
SCK252R0□	2	18	0.025					
SCK252R5□	2.5	15	0.032					
SCK253R0□	3	14.5	0.042					
SCK254R0□	4	14	0.044					
SCK254R7□	4.7	13	0.052					
SCK255R0□	5	12	0.061					
SCK256R8□	6.8	10.5	0.082					
SCK257R0□	7	10	0.092					
SCK258R0□	8	9	0.115					
SCK25100□	10	8	0.141					
SCK25120□	12	7.5	0.164					
SCK25150□	15	6.5	0.210					
SCK25180□	18	5.5	0.231					
SCK25200□	20	5	0.270					

Note 1: □ = Tolerance of R₂₅

Note 2: Special specifications are available upon request.

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■ Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Max. Current at 25°C	Residual Resistance at 25°C I _{max}	Recommend Capacitance @240Vac	Max. Power Rating at 25°C	Dissipation Factor	Thermal Time Constant	Operating Temperature Range
	R ₂₅ (Ω)	I _{max} (A)	R _{I_{max}} (Ω)	C _{th} (μF)	P _{max} (W)	δ(mW/°C)	τ (Sec.)	T _L ~T _U (°C)
SCK301R0□	1	30	0.016	1500	8.0	Approx. 40	Approx. 190	-40 ~ +200
SCK301R5□	1.5	25	0.020					
SCK302R0□	2	23	0.022					
SCK302R5□	2.5	18	0.030					
SCK303R0□	3	17	0.035					
SCK304R0□	4	16	0.048					
SCK304R7□	4.7	15	0.055					
SCK305R0□	5	14	0.057					
SCK306R8□	6.8	12	0.077					
SCK307R0□	7	11.5	0.084					
SCK308R0□	8	10.5	0.100					
SCK30100□	10	10	0.115					
SCK30120□	12	9	0.142					
SCK30150□	15	8	0.175					
SCK30180□	18	7	0.210					
SCK30200□	20	6	0.233					

Note 1: □ = Tolerance of R₂₅

Note 2: Special specifications are available upon request.

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Power Thermistor for Limiting Inrush Current



■ Safety Approvals

- UL&cUL File No: E138827
- CSA File No: 97495
- TUV File No: R 50050155
- CQC File No: CQC05001011984,993,985,942,943,944, CQC05001011988,989,990,963,964,965

Body Size	Certified Model No.	Safety Approvals				
		UL	cUL	CSA	TUV	CQC
5mm	SCK-052	√	√	√	√	√
	SCK-081	√	√		√	√
	SCK-101	√	√	√	√	√
	SCK-121	√	√		√	√
	SCK-20X3	√	√	√	√	√
8mm	SCK-042	√	√	√	√	√
	SCK-4R72	√	√	√	√	√
	SCK-053	√	√	√	√	√
	SCK-063	√	√	√	√	√
	SCK-073	√	√		√	√
	SCK-082	√	√	√	√	√
	SCK-102	√	√	√	√	√
	SCK-152	√	√	√	√	√
	SCK-201	√	√	√	√	√
	SCK-30X	√	√	√	√	√
10mm	SCK-015	√	√		√	√
	SCK-1R35	√	√		√	√
	SCK-1R55	√	√		√	√
	SCK-2R55A	√	√	√	√	√
	SCK-035	√	√	√	√	√
	SCK-044	√	√	√	√	√
	SCK-054	√	√	√	√	√
	SCK-6R83	√	√	√	√	√
	SCK-083	√	√	√	√	√
	SCK-103	√	√	√	√	√
	SCK-123	√	√	√	√	√
	SCK-133	√	√	√	√	√
	SCK-152X	√	√	√	√	√
	SCK-162X	√	√	√	√	√
	SCK-202	√	√	√	√	√
	SCK-222	√	√		√	√
	SCK-252	√	√	√	√	√
	SCK-302	√	√	√	√	√
	SCK-472	√	√	√	√	√
	SCK-502	√	√	√	√	√
	SCK-801	√	√	√	√	√
	SCK-1001	√	√	√	√	√
	SCK-1201	√	√	√	√	√

Body Size	Certified Model No.	Safety Approvals				
		UL	cUL	CSA	TUV	CQC
13mm	SCK-013	√	√		√	√
	SCK-1R37	√	√		√	√
	SCK-2R56	√	√	√	√	√
	SCK-045	√	√		√	√
	SCK-4R74	√	√		√	√
	SCK-055	√	√	√	√	√
	SCK-074	√	√		√	√
	SCK-084	√	√	√	√	√
	SCK-104	√	√	√	√	√
	SCK-124	√	√	√	√	√
	SCK-153	√	√	√	√	√
	SCK-163	√	√	√	√	√
	SCK-183	√	√	√	√	√
	SCK-203	√	√	√	√	√
	SCK-0R78A	√	√		√	√
15mm	SCK-018	√	√		√	
	SCK-1R38	√	√	√	√	√
	SCK-1R58	√	√	√	√	√
	SCK-028	√	√		√	√
	SCK-2R58	√	√	√	√	√
	SCK-037	√	√	√	√	√
	SCK-046	√	√	√	√	√
	SCK-056	√	√	√	√	√
	SCK-065	√	√	√	√	√
	SCK-075	√	√	√	√	√
	SCK-085	√	√		√	√
	SCK-105	√	√	√	√	√
	SCK-125	√	√	√	√	√
	SCK-154	√	√	√	√	√
	SCK-164	√	√	√	√	√
	SCK-184	√	√	√	√	√
	SCK-204	√	√	√	√	√
	SCK-224	√	√		√	√
	SCK-253	√	√	√	√	√
	SCK-303	√	√	√	√	√
	SCK-333	√	√		√	√
	SCK-403	√	√	√	√	√
	SCK-473	√	√	√	√	√

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Body Size	Certified Model No.	Safety Approvals			
		UL	cUL	TUV	CQC
20mm	SCK200R7	✓	✓	✓	✓
	SCK201R0	✓	✓	✓	✓
	SCK201R5	✓	✓	✓	✓
	SCK202R0	✓	✓	✓	✓
	SCK202R5	✓	✓	✓	✓
	SCK203R0	✓	✓	✓	✓
	SCK204R0	✓	✓	✓	✓
	SCK204R7	✓	✓	✓	✓
	SCK205R0	✓	✓	✓	✓
	SCK206R0	✓	✓	✓	✓
	SCK206R8	✓	✓	✓	✓
	SCK207R0	✓	✓	✓	✓
	SCK208R0	✓	✓	✓	✓
	SCK20100	✓	✓	✓	✓
	SCK20120	✓	✓	✓	✓
	SCK20130	✓	✓	✓	✓
	SCK20150	✓	✓	✓	✓
	SCK20160	✓	✓	✓	✓
	SCK20180	✓	✓	✓	✓
	SCK20200	✓	✓	✓	✓
25mm	SCK251R0	✓	✓	✓	✓
	SCK251R5	✓	✓	✓	✓
	SCK252R0	✓	✓	✓	✓
	SCK252R5	✓	✓	✓	✓
	SCK253R0	✓	✓	✓	✓
	SCK254R0	✓	✓	✓	✓
	SCK254R7	✓	✓	✓	✓
	SCK255R0	✓	✓	✓	✓
	SCK256R8	✓	✓	✓	✓
	SCK257R0	✓	✓	✓	✓
	SCK258R0	✓	✓	✓	✓
	SCK25100	✓	✓	✓	✓
	SCK25120	✓	✓	✓	✓
	SCK25150	✓	✓	✓	✓
	SCK25180	✓	✓	✓	✓
	SCK25200	✓	✓	✓	✓

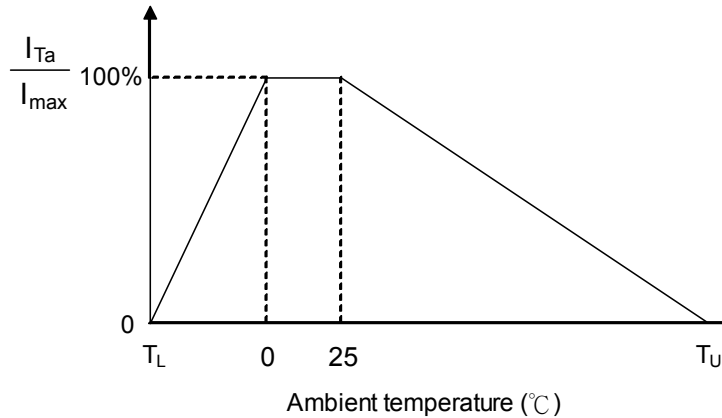
Body Size	Certified Model No.	Safety Approvals			
		UL	cUL	TUV	CQC
30mm	SCK301R0	✓	✓	✓	✓
	SCK301R5	✓	✓	✓	✓
	SCK302R0	✓	✓	✓	✓
	SCK302R5	✓	✓	✓	✓
	SCK303R0	✓	✓	✓	✓
	SCK304R0	✓	✓	✓	✓
	SCK304R7	✓	✓	✓	✓
	SCK305R0	✓	✓	✓	✓
	SCK306R8	✓	✓	✓	✓
	SCK307R0	✓	✓	✓	✓
	SCK308R0	✓	✓	✓	✓
	SCK30100	✓	✓	✓	✓
	SCK30120	✓	✓	✓	✓
	SCK30150	✓	✓	✓	✓
	SCK30180	✓	✓	✓	✓
	SCK30200	✓	✓	✓	✓

NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ Max. Current Derating Curve



T_U : Maximum operating temperature ($^{\circ}C$)

T_L : Minimum operating temperature ($^{\circ}C$)

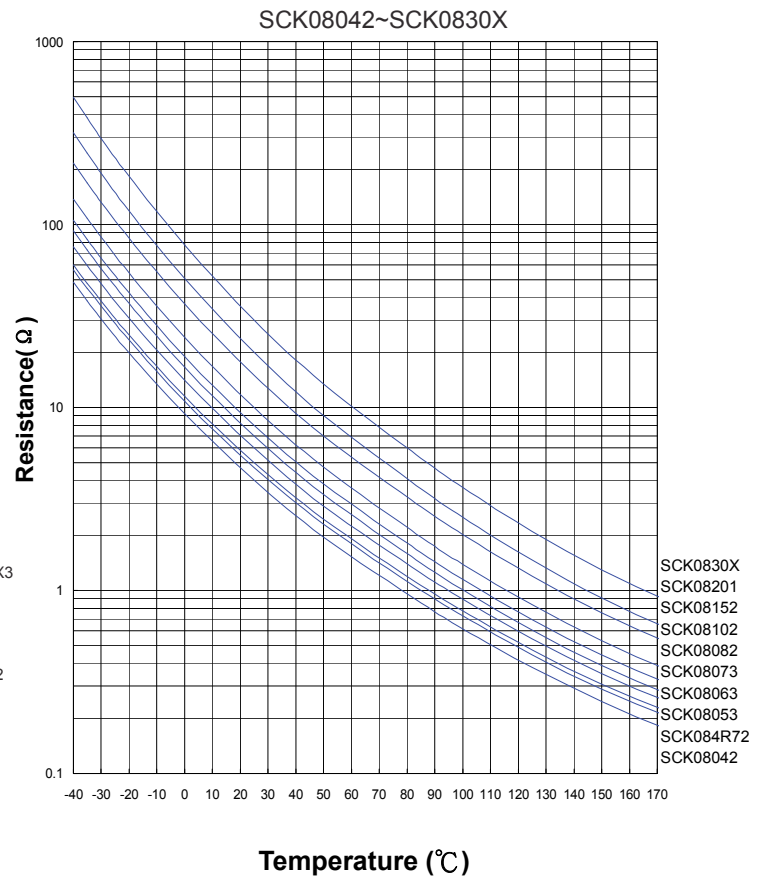
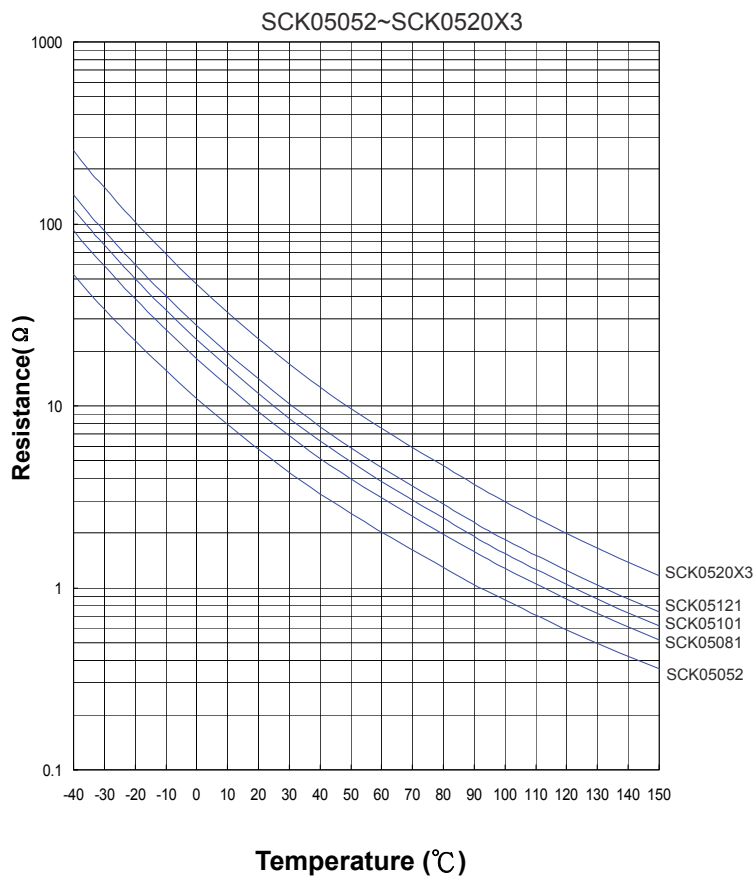
For example:

Ambient temperature(T_a) = 60 $^{\circ}C$

Maximum operating temperature(T_U) = 200 $^{\circ}C$

$$I_{Ta} = [1 - (T_a - 25) / (T_U - 25)] \times I_{max} = 80\% I_{max}$$

■ R-T Characteristic Curves

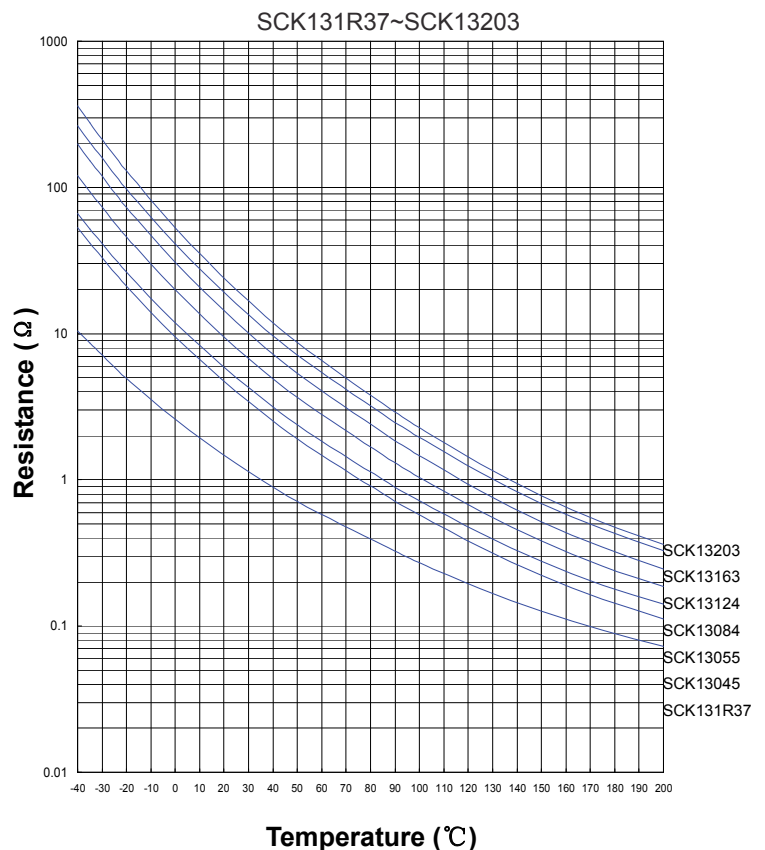
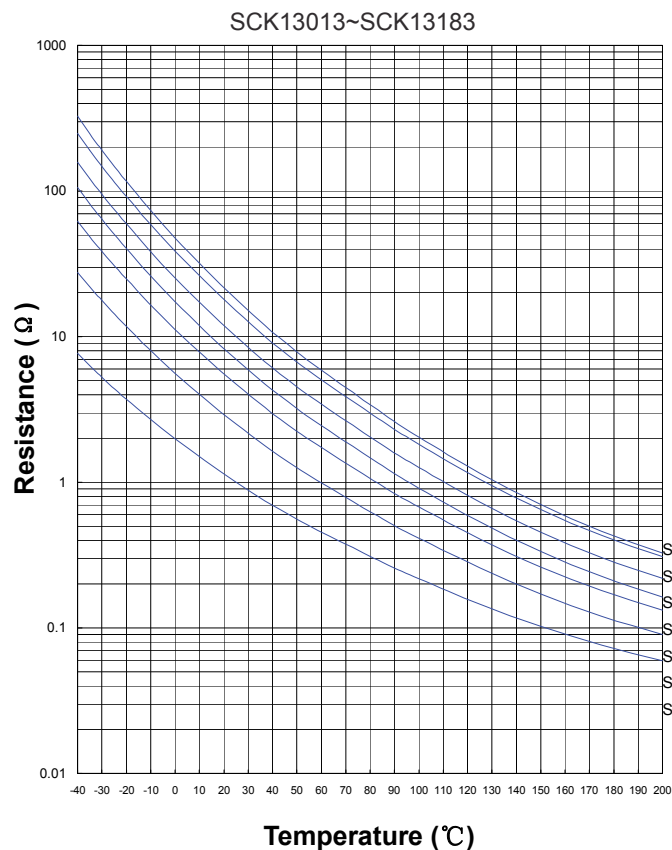
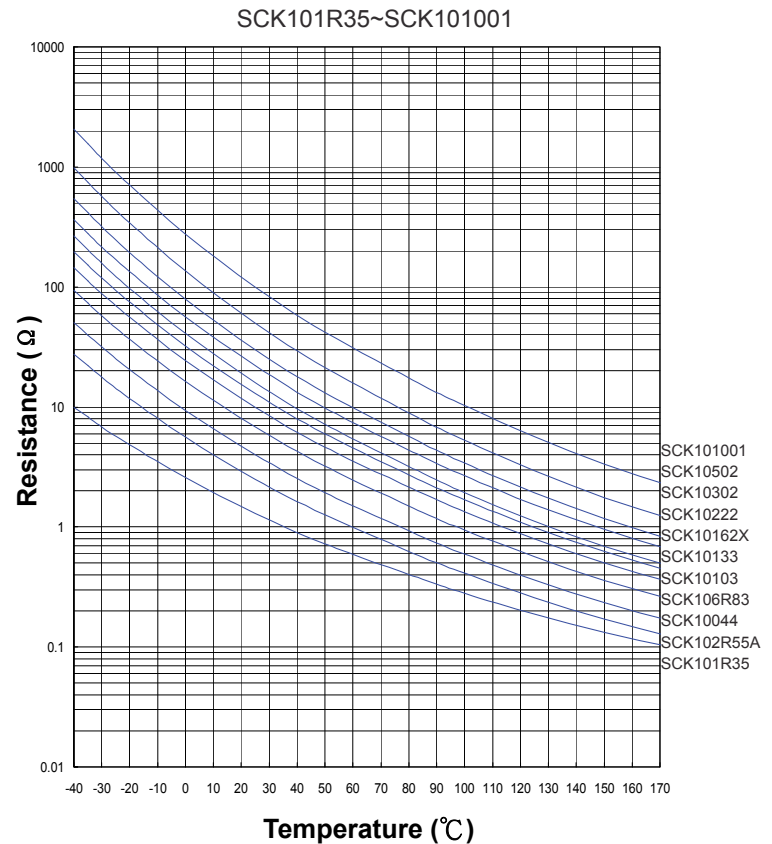
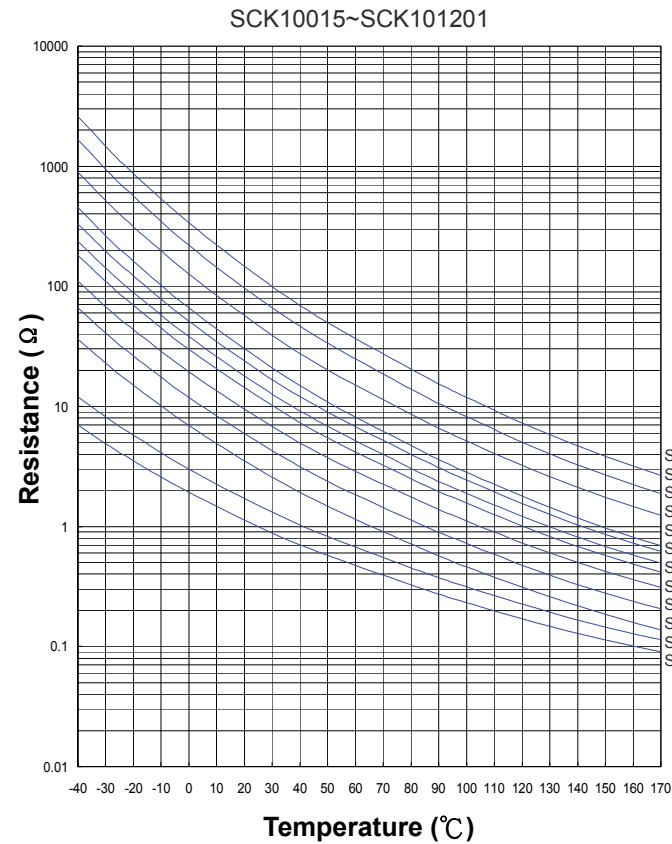


NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ R-T Characteristic Curves

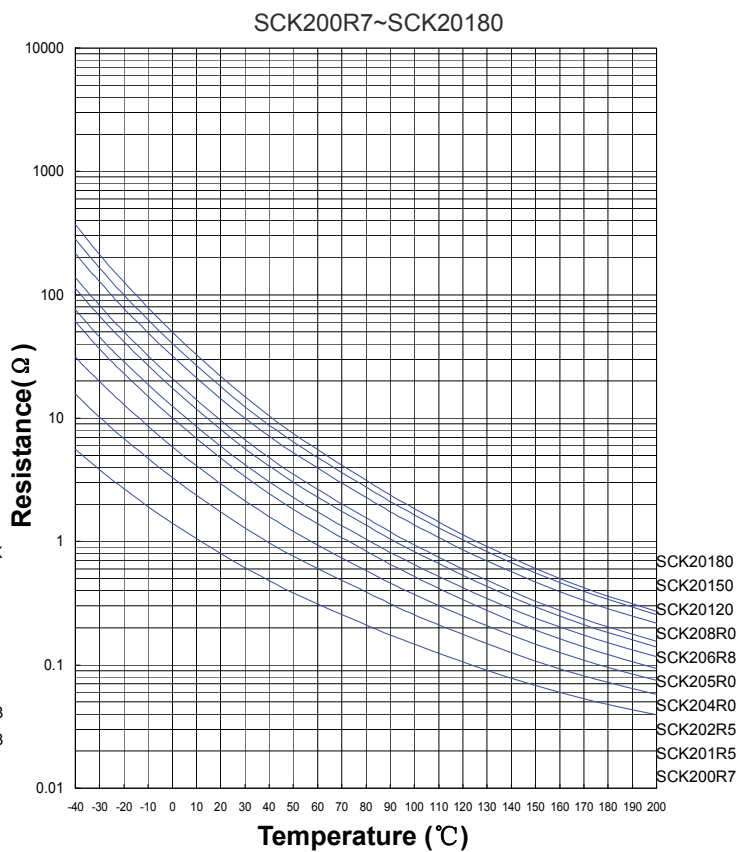
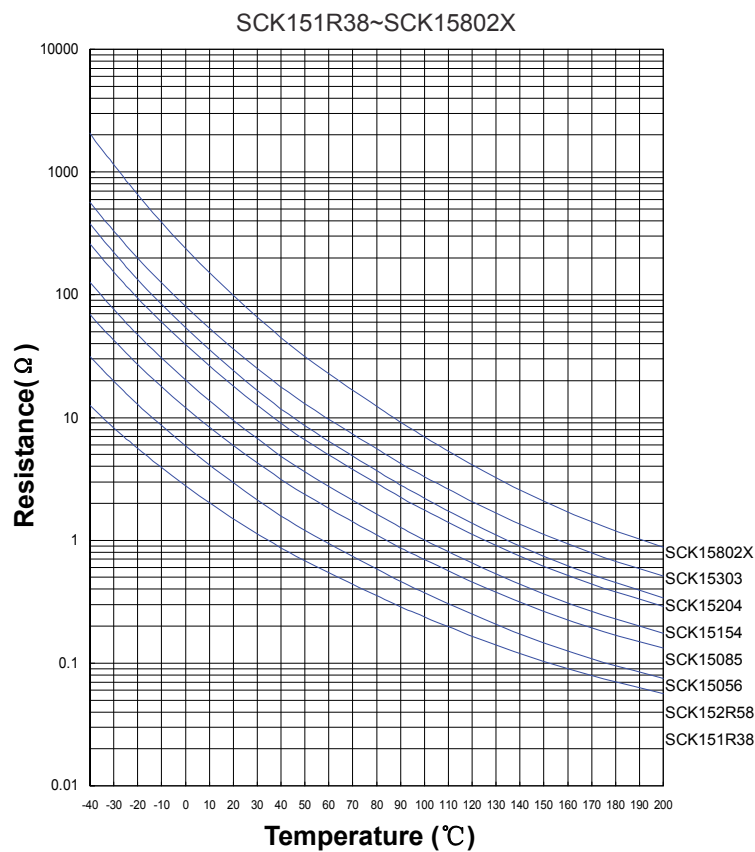
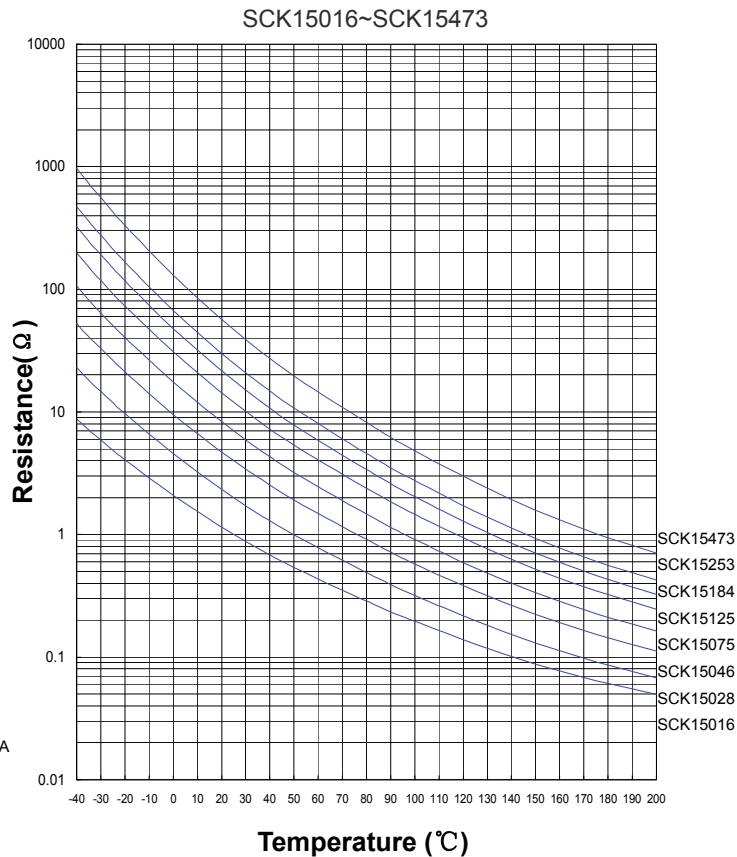
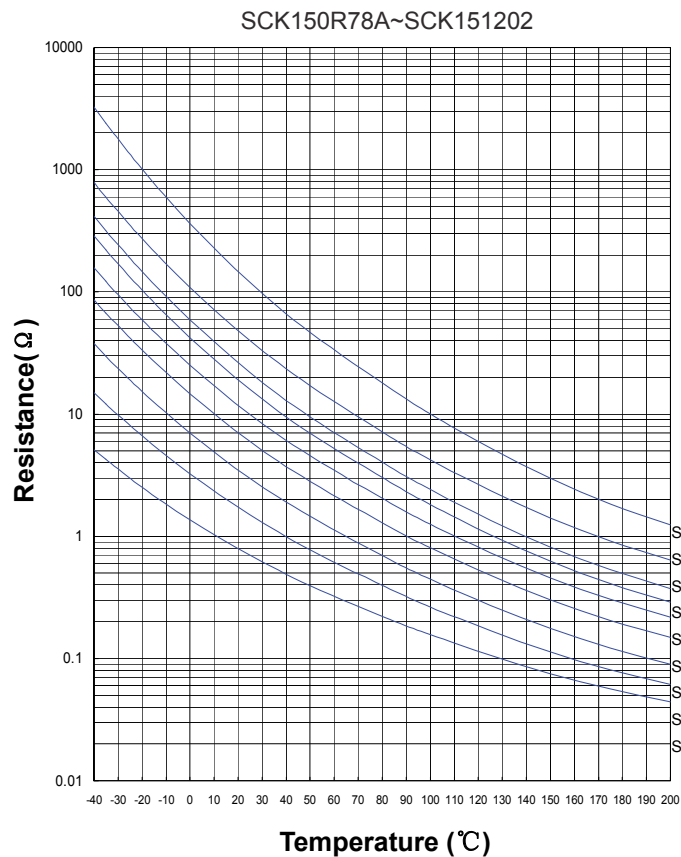


NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ R-T Characteristic Curves



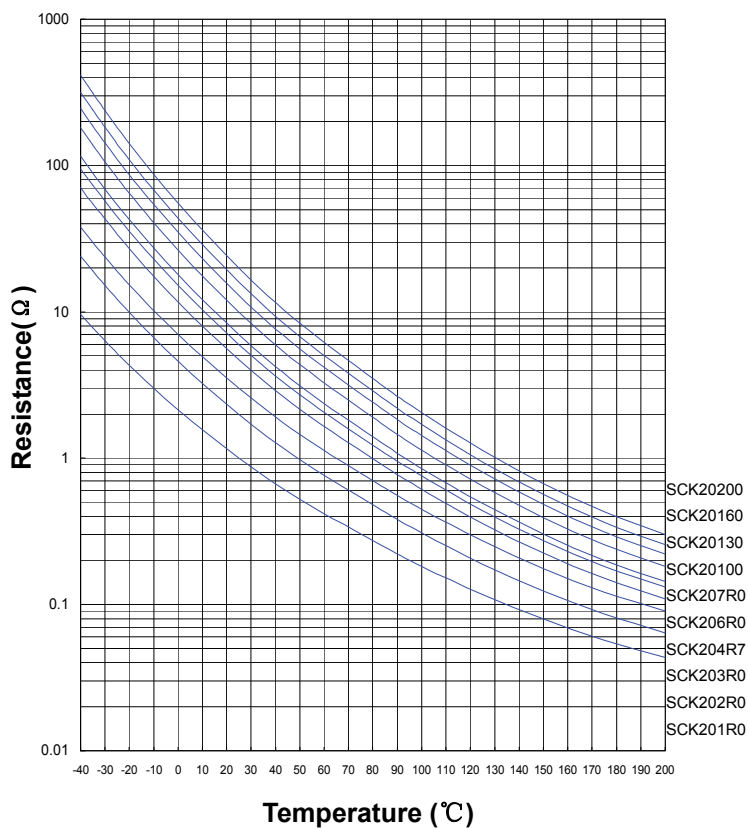
NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current

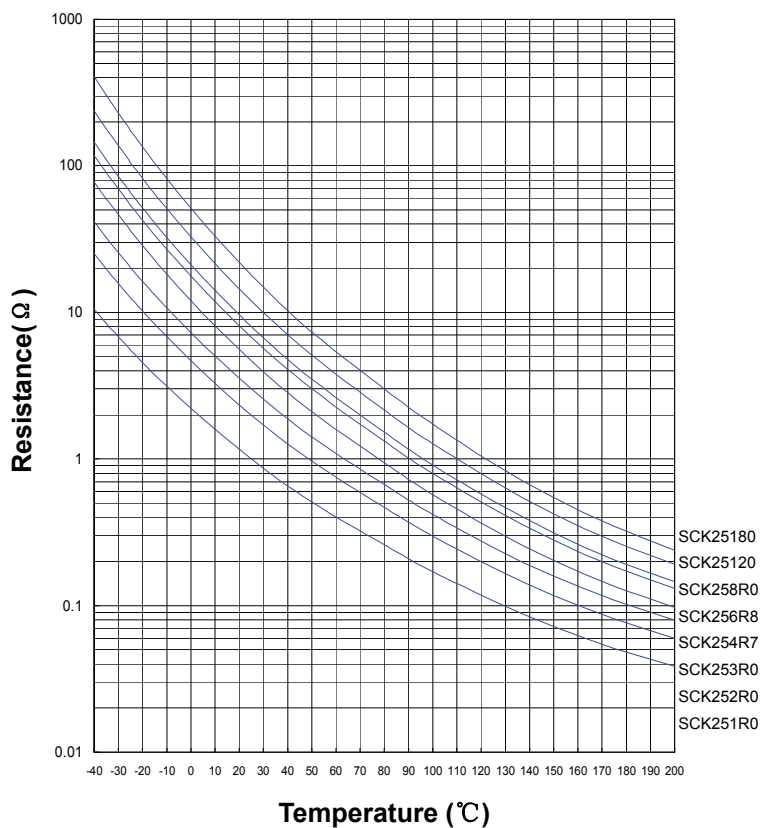


■ R-T Characteristic Curves

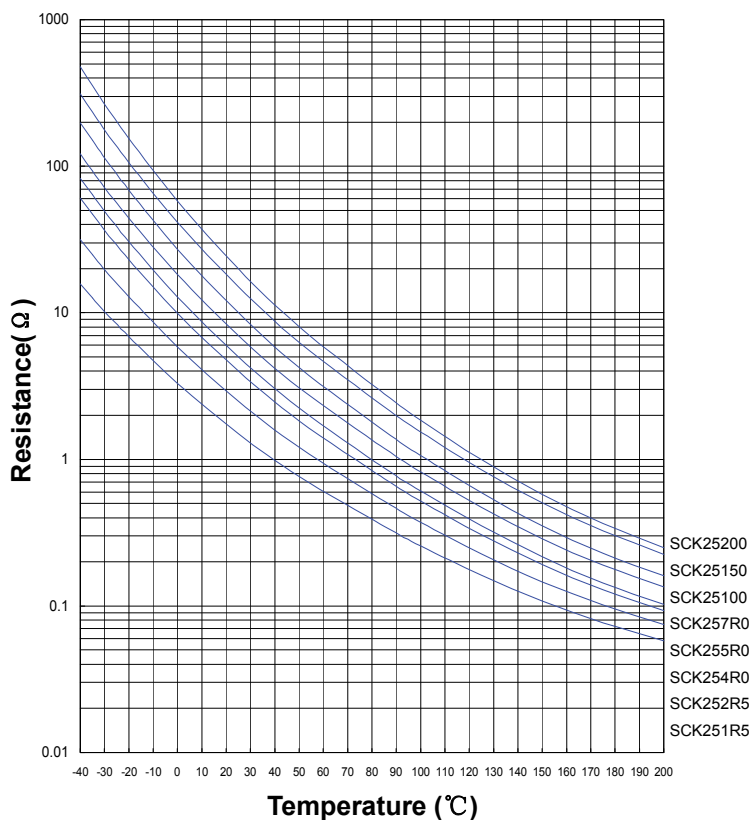
SCK201R0~SCK20200



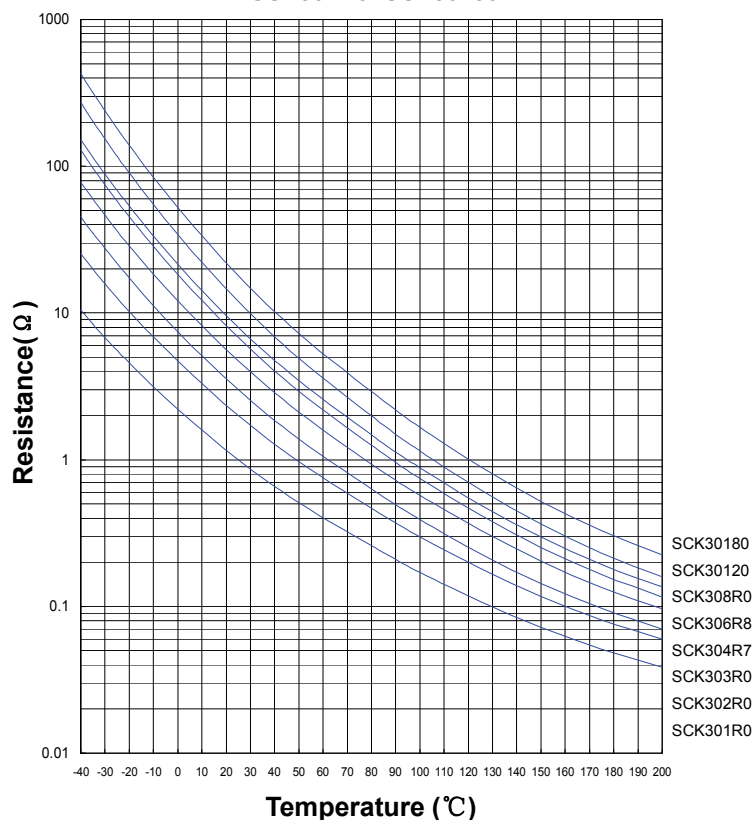
SCK251R0~SCK25180



SCK251R5~SCK25200



SCK301R0~SCK30180

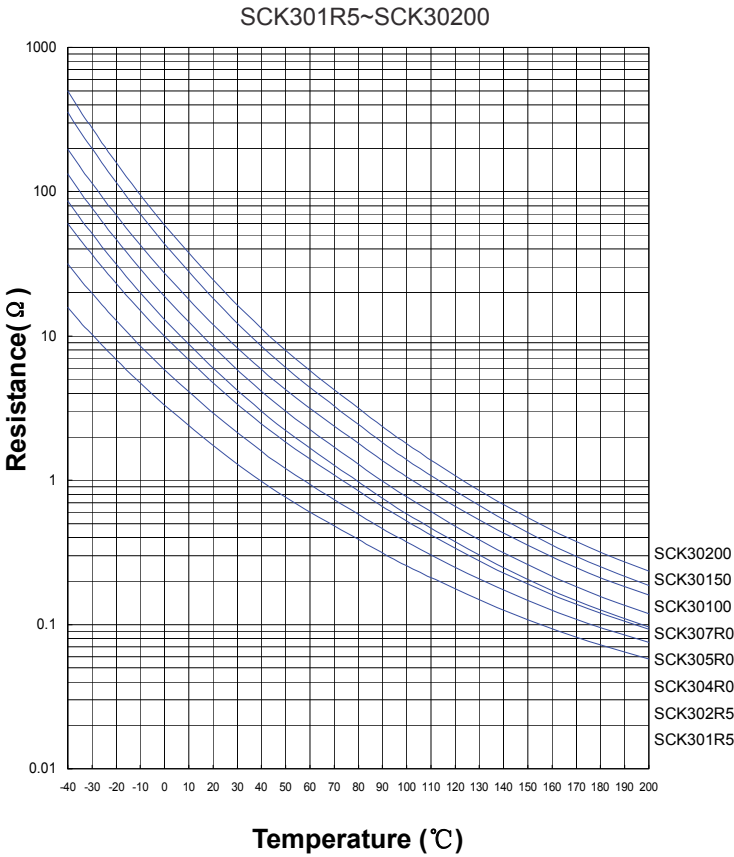


NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ R-T Characteristic Curves



The graph displays the relationship between Voltage (V) and Current (A) for the SCK05052~SCK0520X3 series. The Y-axis represents Voltage (V) on a logarithmic scale from 0.1 to 10. The X-axis represents Current (A) on a logarithmic scale from 0.01 to 100. The graph includes a grid of power dissipation curves (0.05W to 50W) and resistance values (0.01Ω to 200Ω). Five specific curves are highlighted in red, corresponding to the part numbers SCK0520X3, SCK05121, SCK05101, SCK05081, and SCK05052.

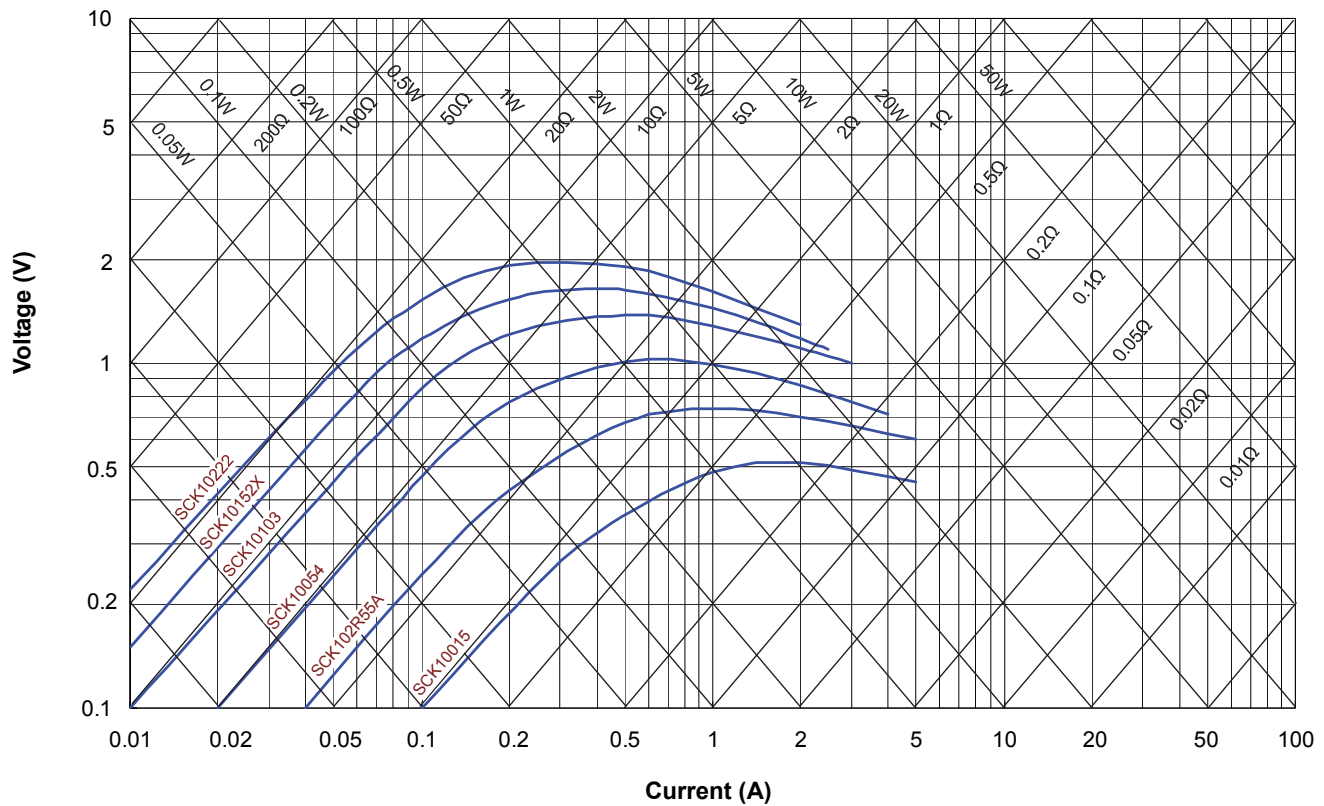


NTC Thermistor : SCK Series

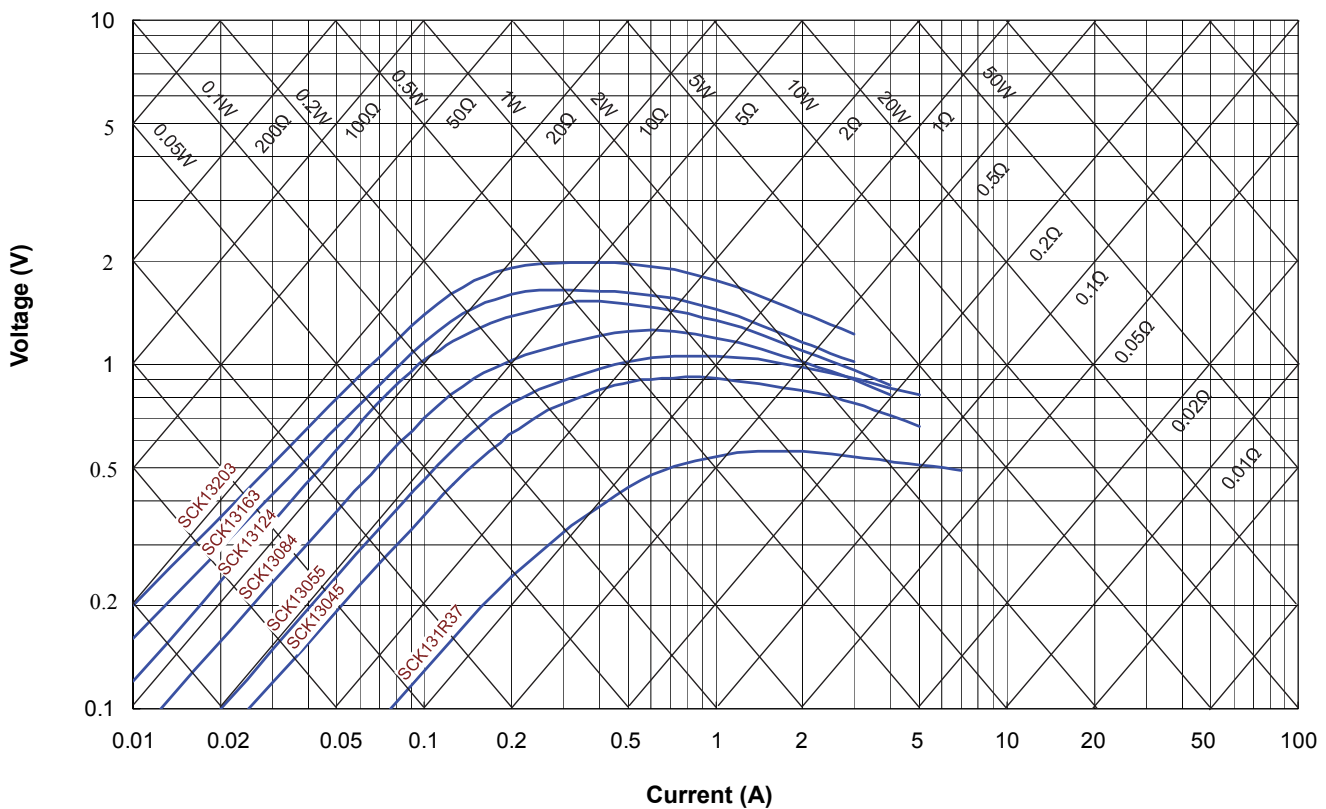
Power Thermistor for Limiting Inrush Current



SCK10015~SCK10222



SCK131R37~SCK13203

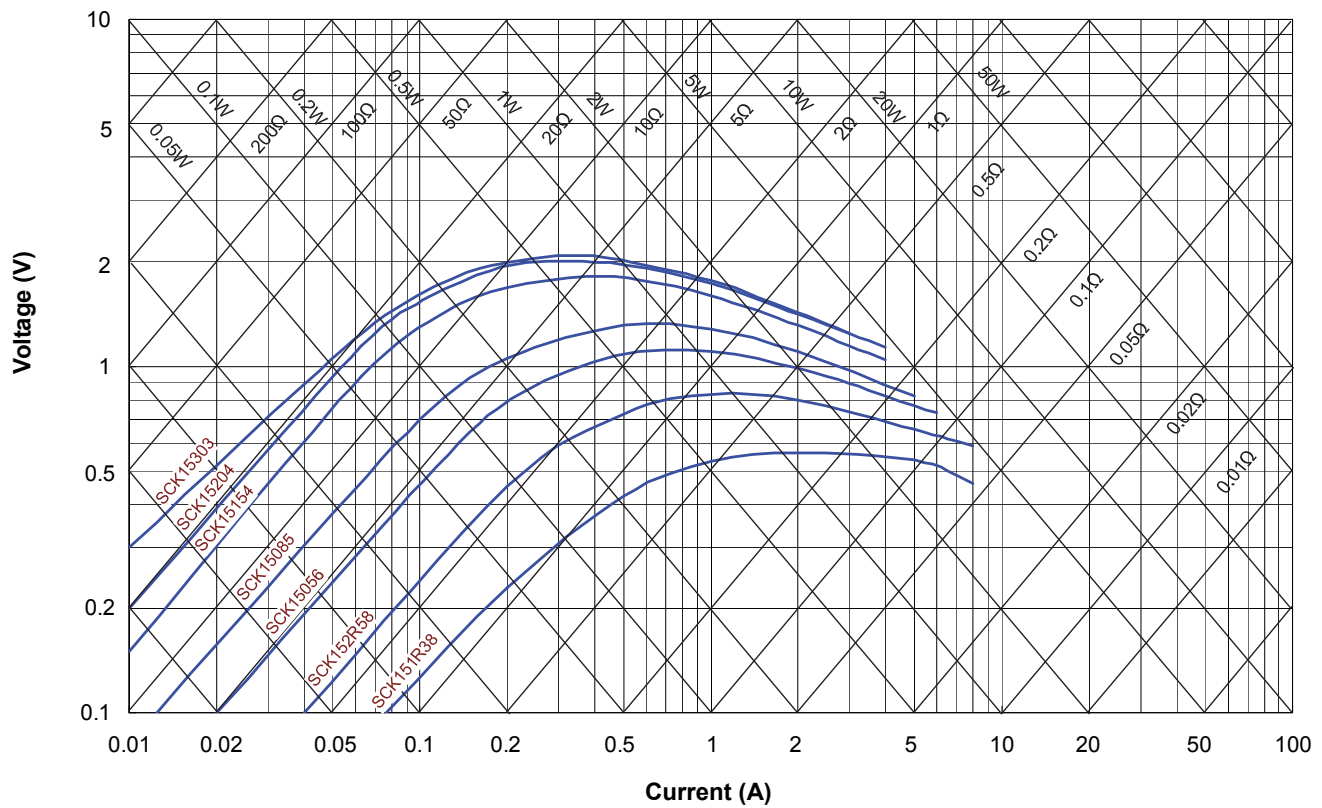


NTC Thermistor : SCK Series

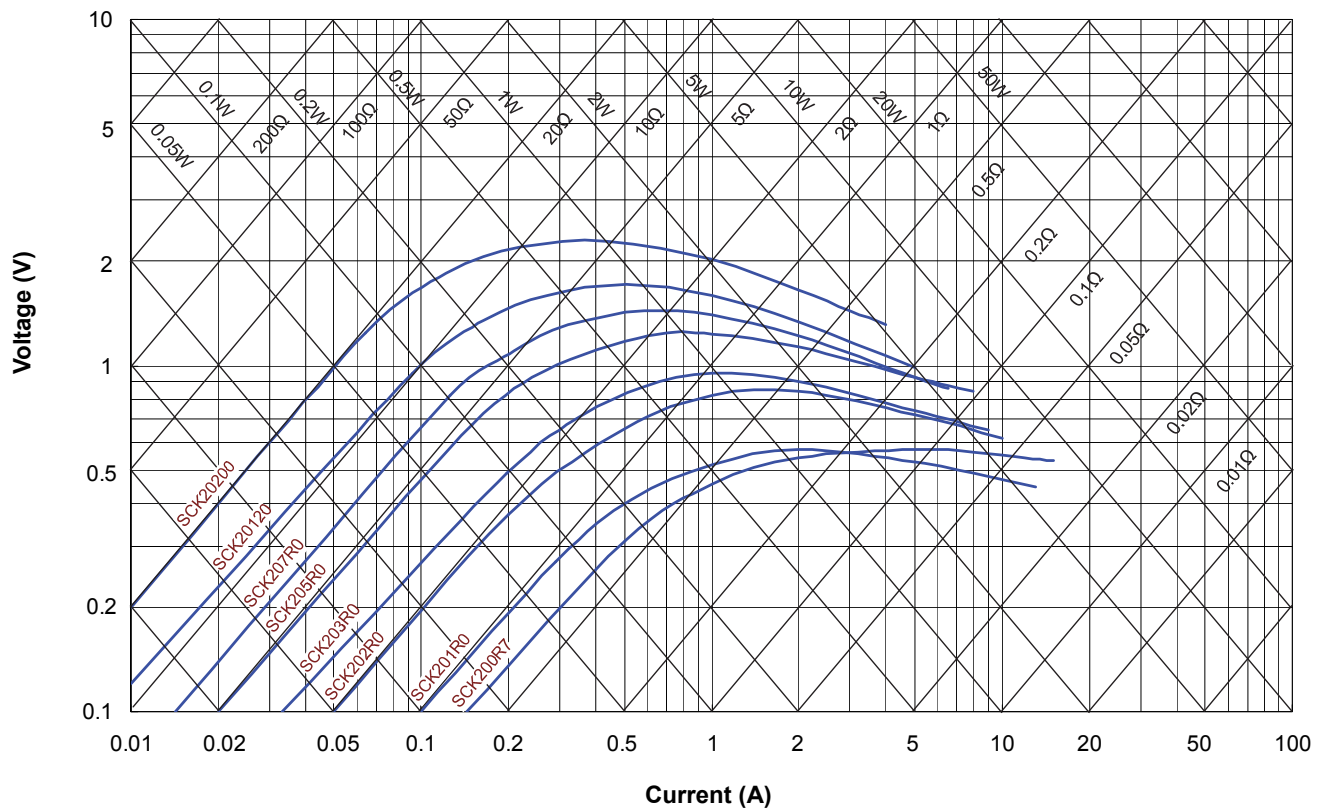
Power Thermistor for Limiting Inrush Current



SCK151R38~SCK15303



SCK200R7~SCK20200

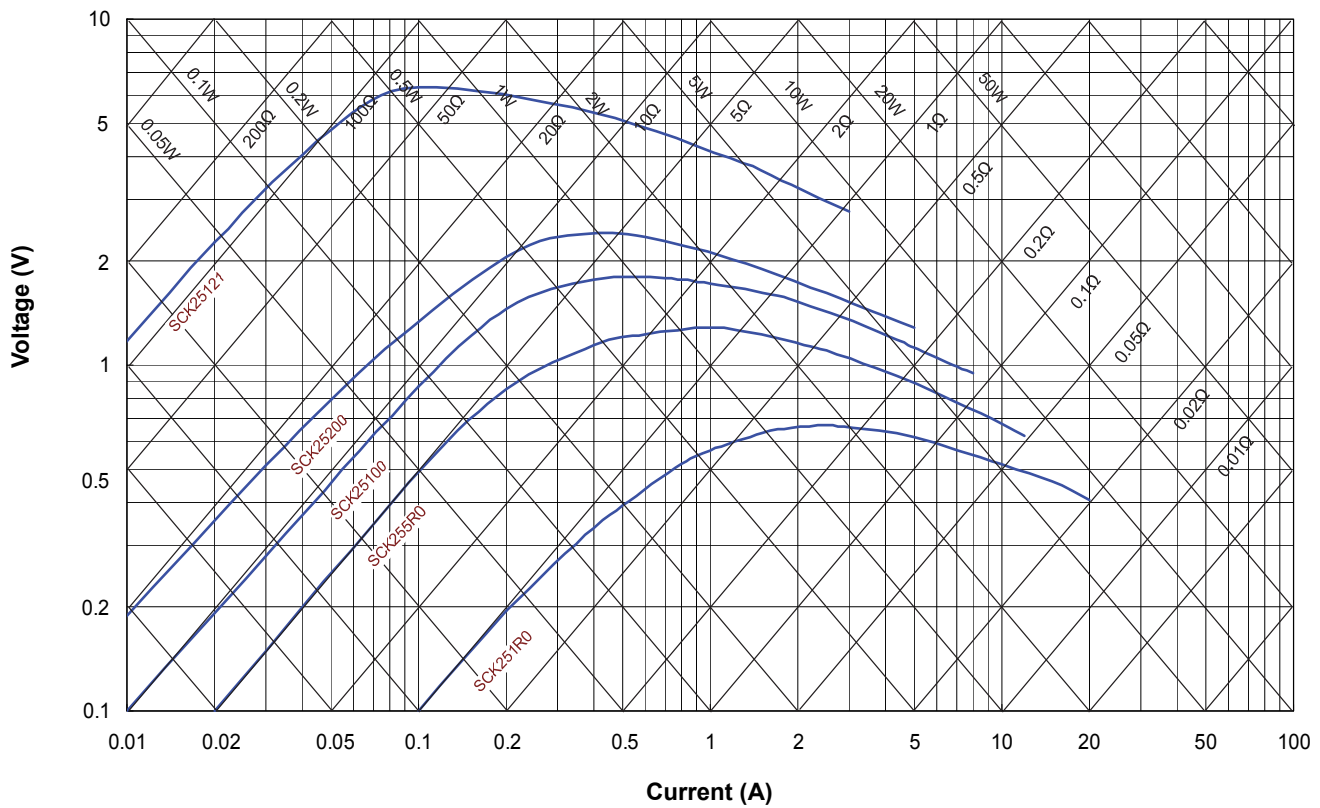


NTC Thermistor : SCK Series

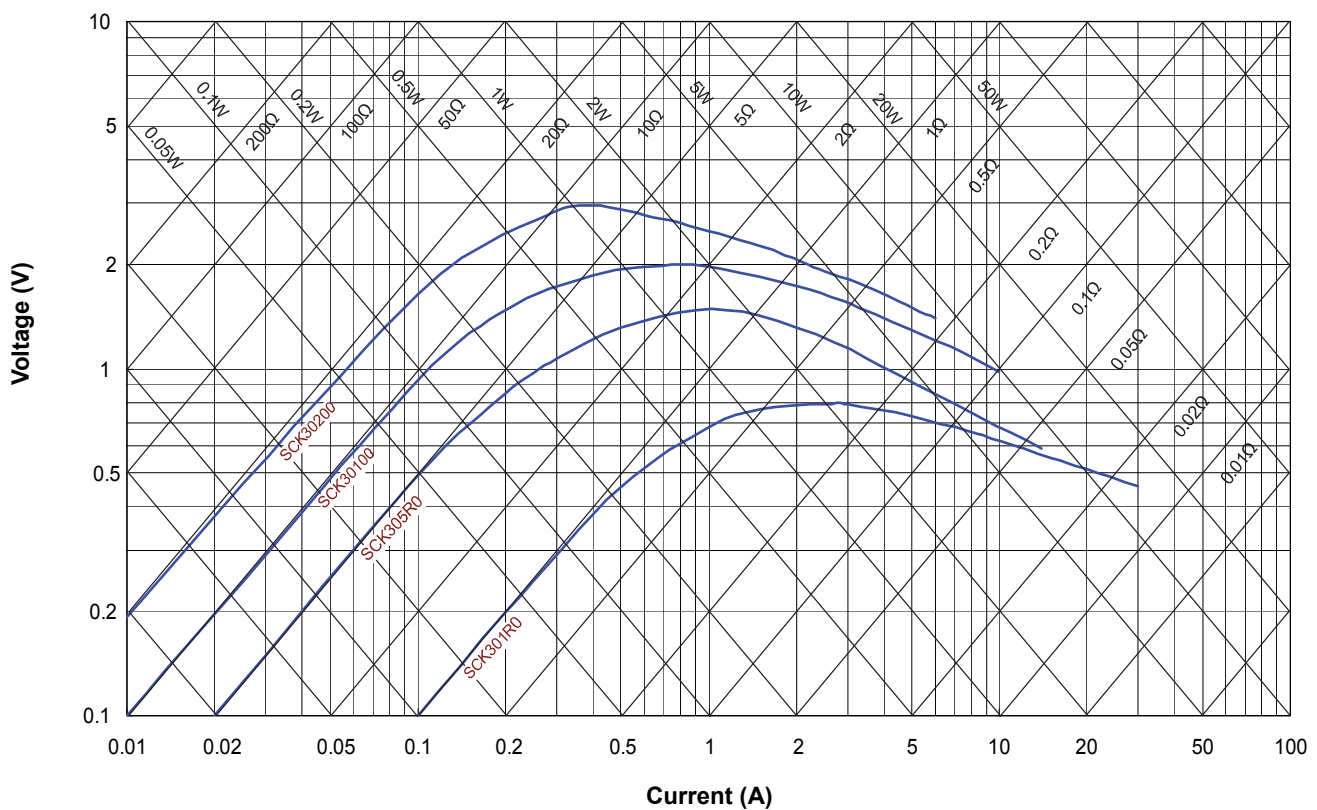
Power Thermistor for Limiting Inrush Current



SCK251R0~SCK25121



SCK301R0~SCK30200



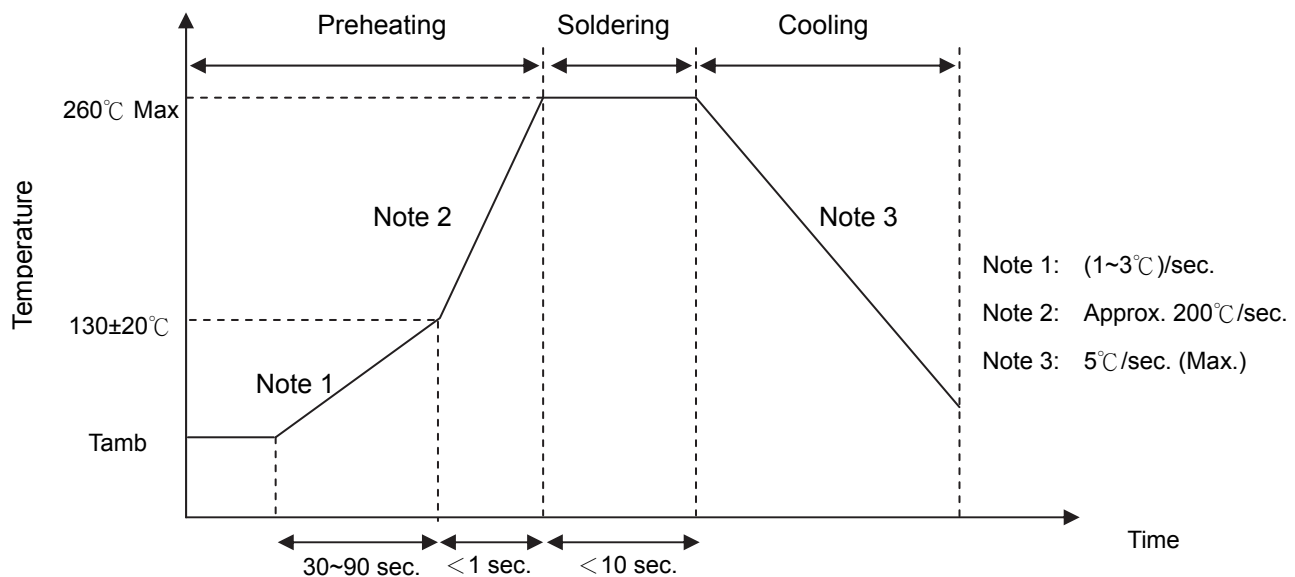
NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ Soldering Recommendation

● Wave Soldering Profile



● Recommended Reworking Conditions with Soldering Iron

Item	Condition
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 sec. (max.)
Distance from Thermistor	2 mm (min.)

NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ Reliability

Item	Standard	Test conditions / Methods	Specifications															
Tensile Strength of Terminals	IEC 60068-2-21	Gradually apply the specified force and keep the unit fixed for 10±1 sec. <table><tr><td>Terminal diameter</td><td>Force</td></tr><tr><td>(mm)</td><td>(Kg)</td></tr><tr><td>0.5<d≤0.80</td><td>1.0</td></tr><tr><td>0.8<d≤1.25</td><td>2.0</td></tr></table>	Terminal diameter	Force	(mm)	(Kg)	0.5<d≤0.80	1.0	0.8<d≤1.25	2.0	No visible damage							
Terminal diameter	Force																	
(mm)	(Kg)																	
0.5<d≤0.80	1.0																	
0.8<d≤1.25	2.0																	
Solderability	IEC 60068-2-20	245 ±3℃, 3 ± 0.3 sec.	At least 95% of terminal electrode is covered by new solder															
Resistance to Soldering Heat	IEC 60068-2-20	260 ± 3℃, 10 ± 1 sec.	No visible damage ΔR ₂₅ /R ₂₅ ≤ 10 %															
High Temperature Storage	IEC 60068-2-2	T _u ± 5 ℃ , 1000± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Damp Heat, Steady State	IEC 60068-2-78	40 ± 2℃, 90~95% RH, 1000 ± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Rapid Change of Temperature	IEC 60068-2-14	The conditions shown below shall be repeated 5 cycles. <table><tr><td>Step</td><td>Temperature (℃)</td><td>Period (minutes)</td></tr><tr><td>1</td><td>T_L ± 5</td><td>30 ± 3</td></tr><tr><td>2</td><td>Room temperature</td><td>5 ± 3</td></tr><tr><td>3</td><td>T_U ± 5</td><td>30 ± 3</td></tr><tr><td>4</td><td>Room temperature</td><td>5 ± 3</td></tr></table>	Step	Temperature (℃)	Period (minutes)	1	T _L ± 5	30 ± 3	2	Room temperature	5 ± 3	3	T _U ± 5	30 ± 3	4	Room temperature	5 ± 3	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %
Step	Temperature (℃)	Period (minutes)																
1	T _L ± 5	30 ± 3																
2	Room temperature	5 ± 3																
3	T _U ± 5	30 ± 3																
4	Room temperature	5 ± 3																
Max. Current	IEC 60539-1	25 ± 5℃, I _{max.} , 1000± 24 hrs	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Endurance	Specification Standard	25 ± 5℃, I _{max.} , C _{th} , 1min ON / 5 mins OFF x 1000 cycles C _{th} = Capacitance at 240 Vac	No visible damage ΔR ₂₅ /R ₂₅ ≤ 20 %															
Insulation Test	MIL-STD-202F -Method 302	1000 V _{DC} , 1 min	No visible damage ≥ 500 MΩ															

NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



■ Packaging

● Taping Specification

S (Straight lead) Type

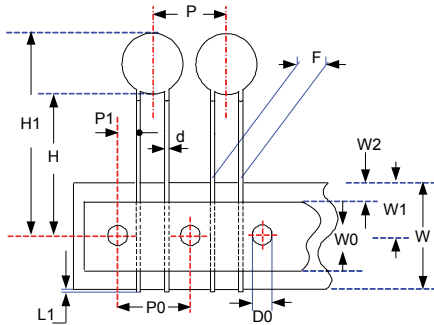


Figure A

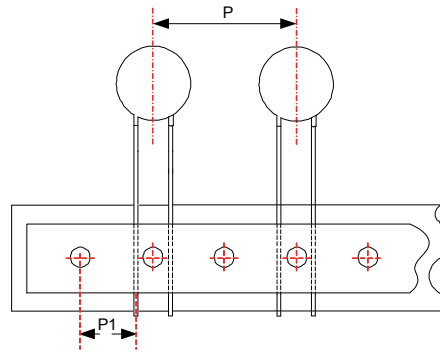


Figure B

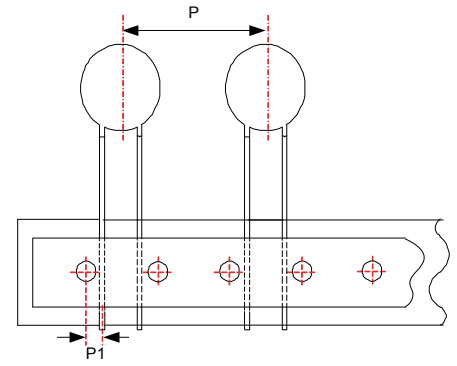
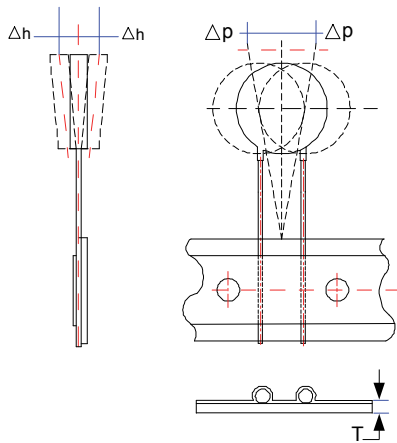


Figure C



(Unit: mm)

Taping Dimension	Disc Size	P ₀	F	P	P ₁	H	H ₁	d	W ₀	W ₁	W ₂	W	△P	△h	L ₁	D ₀	T	Figure
		±0.3	±1	±1	±0.7	+2/-0	Max.	±0.02	±1	+0.75/-0.5	Max.	+1/-0.5	Max.	Max.	Max.	±0.2	±0.2	
P ₀ :12.7	05	12.7	4.0	12.7	4.35	18	28	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	08	12.7	5.0	12.7	3.85	18	30	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	10	12.7	5.0	12.7	3.85	18	32	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	13	12.7	7.5	25.4	8.95	18	35	0.8	12	9	3	18	1	2	0.5	4	0.6	B
	15	12.7	7.5	25.4	8.95	18	37	1.0	12	9	3	18	1	2	0.5	4	0.6	B
	20	12.7	7.5	25.4	8.95	18	42	1.0	12	9	3	18	1	2	0.5	4	0.6	B
P ₀ :15.0	05	15.0	4.0	15.0	5.50	18	28	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	08	15.0	5.0	15.0	5.00	18	30	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	10	15.0	5.0	15.0	5.00	18	32	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	13	15.0	7.5	30.0	3.75	18	35	0.8	12	9	3	18	1	2	0.5	4	0.6	C
	15	15.0	7.5	30.0	3.75	18	37	1.0	12	9	3	18	1	2	0.5	4	0.6	C
	20	15.0	7.5	30.0	3.75	18	42	1.0	12	9	3	18	1	2	0.5	4	0.6	C

NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



F Kink Type

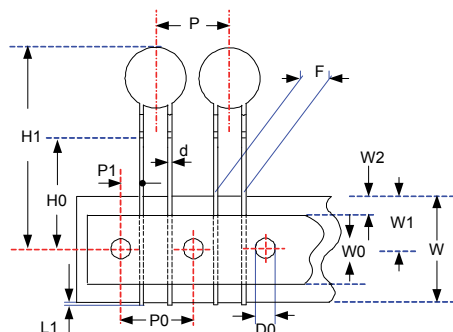


Figure A

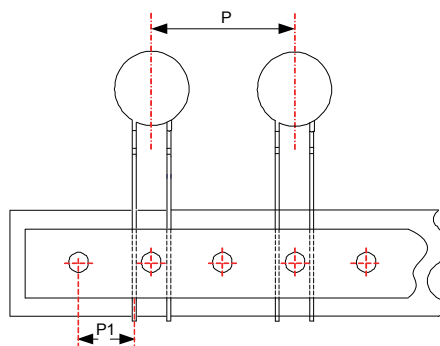


Figure B

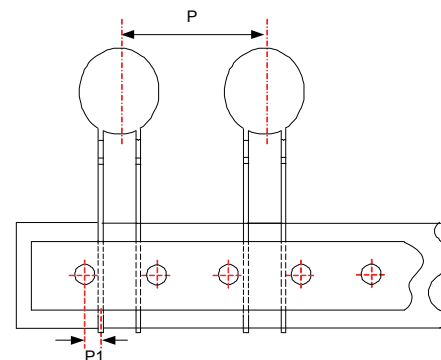
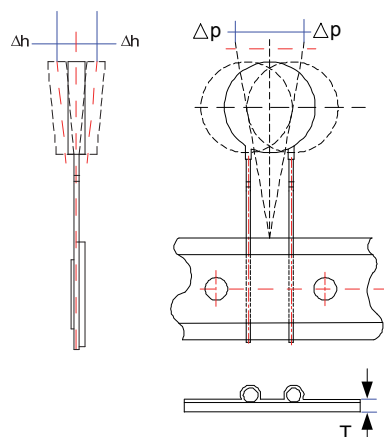


Figure C



(Unit: mm)

Taping Dimension	Disc Size	P ₀	F	P	P ₁	H ₀	H ₁	d	W ₀	W ₁	W ₂	W	ΔP	Δh	L ₁	D ₀	T	Figure
		±0.3	±1	±1	±0.7	±0.5	Max.	±0.02	±1	+0.75 /-0.5	Max.	+1/ -0.5	Max.	Max.	Max.	±0.2	±0.2	
P ₀ :12.7	05	12.7	4.0	12.7	4.35	16	28	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	08	12.7	5.0	12.7	3.85	16	30	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	10	12.7	5.0	12.7	3.85	16	32	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	13	12.7	7.5	25.4	8.95	16	35	0.8	12	9	3	18	1	2	0.5	4	0.6	B
	15	12.7	7.5	25.4	8.95	16	37	1.0	12	9	3	18	1	2	0.5	4	0.6	B
	20	12.7	7.5	25.4	8.95	16	42	1.0	12	9	3	18	1	2	0.5	4	0.6	B
P ₀ :15.0	05	15.0	4.0	15.0	5.50	16	28	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	08	15.0	5.0	15.0	5.00	16	30	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	10	15.0	5.0	15.0	5.00	16	32	0.8	12	9	3	18	1	2	0.5	4	0.6	A
	13	15.0	7.5	30.0	3.75	16	35	0.8	12	9	3	18	1	2	0.5	4	0.6	C
	15	15.0	7.5	30.0	3.75	16	37	1.0	12	9	3	18	1	2	0.5	4	0.6	C
	20	15.0	7.5	30.0	3.75	16	42	1.0	12	9	3	18	1	2	0.5	4	0.6	C

NTC Thermistor : SCK Series

Power Thermistor for Limiting Inrush Current



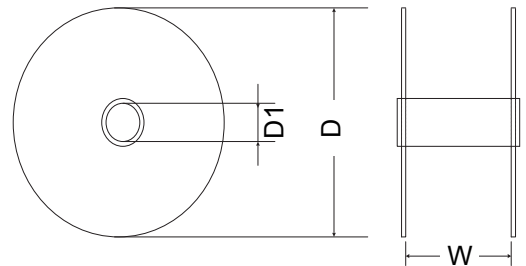
■ Quantity

● Bulk Packing

Series	Standard Lead Type Quantity (pcs/bag)	Cut Lead Type Quantity (pcs/bag)	L kink Type Quantity (pcs/bag)
SCK05	250	500	---
SCK08	250	250	200
SCK10	200	250	200
SCK13	100	200	100
SCK15	100	100	100
SCK20	500 (pcs/box)	50	50
SCK25	168 (pcs/box)	168 (pcs/box)	---
SCK30	168 (pcs/box)	168 (pcs/box)	---

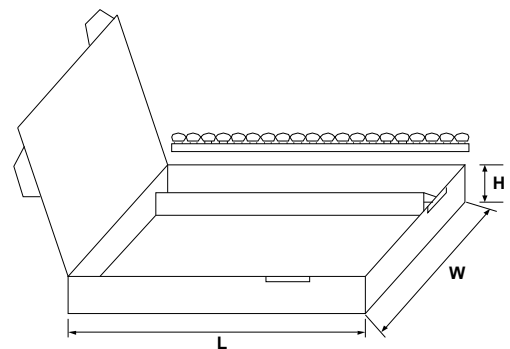
● Reel Packing

Series	D (mm)	D1 (mm)	W (mm)	Quantity (pcs/reel)
SCK05	340±10	31±1	55±1	2,500
SCK08				1,500
SCK10				1,500
SCK13				750
SCK15				750
SCK20				500



● Ammo Packing

Series	Quantity (pcs/box)
SCK05	1,000
SCK08	1,000
SCK10	1,000
SCK13	500
SCK15	500
SCK20	500



(Unit: mm)

Body Size	L	W	H
Φ5~Φ20	348	275	60

■ Warehouse Storage Conditions of Products

● Storage Conditions:

1. Storage Temperature: -10°C~+40°C
2. Relative Humidity: ≤75%RH
3. Keep away from corrosive atmosphere and sunlight.

● Period of Storage: 1 year