



# DATA SHEET

**PRODUCT** **NTC POWER Thermistor**

**SERIES** JNR Series

**PART NO.** \_\_\_\_\_

**QUICK REFERENCE DATA**

PARAMETER	VALUE	UNIT
Size	5 ~ 25	mm
Resistance Value R25	0.7 ~ 220	Ω
Max Steady State Current I <sub>max</sub>	0.3~13	Amp
Max. Capacitance@240VAC	68~1200	μF

**ISSUE DATE** 2022/09/12

**REVISION DATE** 2022/09/12

**REFERENCE NO.** \_\_\_\_\_

**RoHS COMPLIANCE ITEM**

**Halogen Free**

**Disclaimer:**

- This datasheet is downloaded from the Website of Joyin Co., Ltd, and Joyin Co., Ltd. reserves all rights for modification content without further notification.
- All product, specification and data are subject to change without notice.
- Joyin Co., Ltd, its affiliates, agents, employees, and all persons acting on its or their behalf, hereby disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any product related information, including but not limited to product specifications, datasheets, pictures and/or graphics.
- Joyin Co., Ltd makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. It is the customer's responsibility to validate that a particular product is suitable for use in a particular application.
- To the maximum extent permitted by applicable law, Joyin Co., Ltd disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- If you have any questions, please contact our sales staff.



## Features

1. RoHS / Halogen-Free (HF) compliant
2. Body size: Ø5mm ~ Ø25mm
3. Highly stable electrical characteristics
4. Coating material flame retardant to UL94V-0
5. Wide resistance range
6. Agency recognition: UL / TUV / CQC

## Applications

1. Home appliances
2. Office automation
3. Switch mode power supplies
4. Adapters
5. Lighting driver

## How to order




Part Number Code														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
J	N	R	1	0	S	1	0	0	L	8	5	p	U	5
①			②			③			④	⑤	⑥	⑦	⑧	

①	Product Type	JNR series	④	Tolerance of R25	L = ±15% M = ±20%	⑦	Lead Style	P = Straight Lead Y = Vertical Kink Lead I = Inside Kink Lead E = Outside Kink Lead G = Winder Kink Lead
②	Body Size	05S = 5mm 08S = 8mm 10S = 10mm 15S = 15mm 20S = 20mm 25S = 25mm	⑤	Lead Diameter	6 = 0.6mm 8 = 0.8mm 1 = 1.0mm	⑧	Packaging	50 = L:5.0±1mm for Straight Lead or L1:5.0±0.5mm for Kink Lead U4 = L1:24mm for Bulk & Kink Lead U5 = L:25mm for Bulk & Straight Lead AW = H0:16mm for Ammo RY = H0:20mm for Tape/Reel
③	Resistance @ 25°C (R25)	2R5 = 2.5Ω 050 = 5Ω 100 = 10Ω 101 = 100Ω	⑥	Lead Spacing	5 = 5mm 7 = 7.5mm 1 = 10mm			




## Safety Certification

Standard NO	UL / CUL	TUV	CQC
	UL1434	EN 60539-1:2016	GB/T6663.1-2007
File NO	E171531	R 50236285	CQC10001050816




## Electrical Characteristics

Part No	Resistance at 25°C	I <sub>max</sub>	R <sub>I</sub> max	Maximum Load Cap. AC240V	P <sub>max</sub> typical	Dissipation factor typical	Thermal time constant typical	Rated temperature	Safety	Approvals	
	(Ohms)	(Amps)	(Ω)	(μF)	(W)	δ(mW/°C)	(sec.)	T <sub>L</sub> ~ T <sub>U</sub> °C			
JNR05S030□	3.0	3.0	0.220	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S040□	4.0	2.0	0.350	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S050□	5.0	2.0	0.417	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S05A□	5.0	3.0	0.200	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S070□	7.0	1.2	0.554	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S080□	8.0	1.0	0.911	68	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S08A□	8.0	2.0	0.420	68	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S100□	10	1.0	1.129	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S10A□	10	2.0	0.675	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S120□	12	1.0	1.188	68	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S200□	20	0.3	5.600	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR05S20A□	20	1.0	2.000	100	1.6	Approx. 13	Approx. 25	-40 ~ +150	■	■	■
JNR08S2R5□	2.5	4.0	0.103	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S030□	3.0	3.0	0.220	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S040□	4.0	2.0	0.428	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S4R7□	4.7	3.0	0.224	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S050□	5.0	3.0	0.238	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S060□	6.0	3.0	0.284	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S070□	7.0	3.0	0.285	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S080□	8.0	3.0	0.224	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S100□	10	3.0	0.280	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S150□	15	2.0	0.567	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S180□	18	2.0	0.680	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S200□	20	1.0	1.157	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S220□	22	1.0	1.279	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■
JNR08S300□	30	0.5	4.087	100	2.0	Approx. 14	Approx. 33	-40 ~ +170	■	■	■




Note : □ = Tolerance of R25 (L = ±15% , M = ±20%)

Part No	Resistance at 25°C	I <sub>max</sub>	R <sub>I</sub> max	Maximum Load Cap. AC240V	P <sub>max</sub> typical	Dissipation factor typical	Thermal time constant typical	Rated temperature	Safety	Approvals	
	(Ohms)	(Amps)	(Ω)	(μF)	(W)	δ(mW/°C)	(sec.)	T <sub>L</sub> ~ T <sub>U</sub> °C			
JNR10S1R0□	1.0	5.0	0.081	150	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S1R3□	1.3	5.0	0.083	150	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S1R5□	1.5	5.0	0.096	150	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S2R0□	2.0	5.0	0.107	180	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S2R5□	2.5	5.0	0.118	220	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S030□	3.0	5.0	0.127	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S040□	4.0	4.0	0.160	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S050□	5.0	4.0	0.176	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S060□	6.0	3.0	0.234	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S6R8□	6.8	3.0	0.265	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S070□	7.0	3.0	0.273	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S080□	8.0	3.0	0.287	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S100□	10	3.0	0.303	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S120□	12	3.0	0.318	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S130□	13	3.0	0.345	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S150□	15	2.5	0.407	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S160□	16	2.5	0.410	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S200□	20	2.0	0.576	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S220□	22	2.0	0.586	150	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S250□	25	2.0	0.595	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S300□	30	2.0	0.714	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S470□	47	2.0	0.795	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S500□	50	2.0	0.801	330	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S800□	80	1.0	2.217	390	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S101□	100	1.0	2.275	220	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■
JNR10S121□	120	1.0	2.693	390	2.3	Approx. 16	Approx. 40	-40 ~ +170	■	■	■

Note : □ = Tolerance of R25 (L = ±15% , M = ±20%)

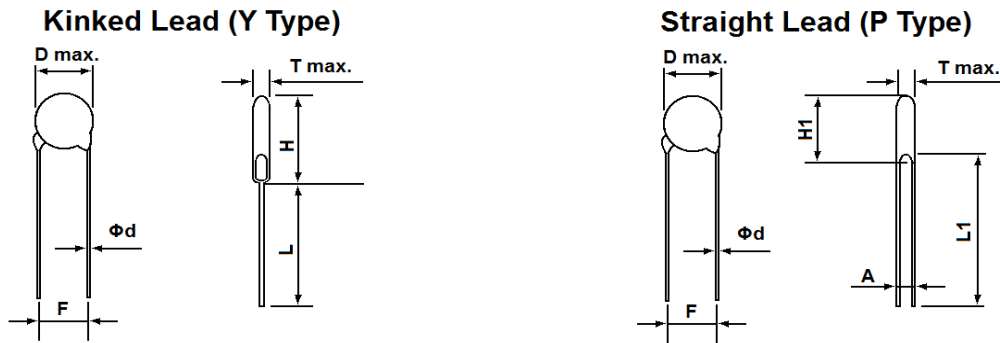
Part No	Resistance at 25°C	I <sub>max</sub>	R <sub>I</sub> max	Maximum Load Cap. AC240V	P <sub>max</sub> typical	Dissipation factor typical	Thermal time constant typical	Rated temperature	Safety	Approvals	
	(Ohms)	(Amps)	(Ω)	(μF)	(W)	δ(mW/°C)	(sec.)	T <sub>L</sub> ~ T <sub>U</sub> °C			
JNR13S1R0□	1.0	7.0	0.042	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S1R3□	1.3	7.0	0.067	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S2R0□	2.0	5.0	0.090	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S2R5□	2.5	6.0	0.096	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S030□	3.0	6.0	0.104	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S040□	4.0	5.0	0.124	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S4R7□	4.7	5.0	0.146	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S050□	5.0	5.0	0.155	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S060□	6.0	5.0	0.180	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S070□	7.0	4.0	0.184	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S080□	8.0	4.0	0.206	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S100□	10	5.0	0.129	330	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S120□	12	4.0	0.210	560	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S150□	15	3.0	0.317	560	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S160□	16	3.0	0.338	560	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S180□	18	3.0	0.360	560	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S200□	20	2.8	0.400	470	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S250□	25	2.0	0.763	560	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR13S500□	50	2.0	0.636	560	3.2	Approx. 18	Approx. 60	-40 ~ +200	■	■	■
JNR15S0R7□	0.7	8.0	0.027	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S1R0□	1.0	8.0	0.038	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S1R3□	1.3	8.0	0.054	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S1R5□	1.5	8.0	0.058	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S2R0□	2.0	8.0	0.077	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S2R5□	2.5	8.0	0.074	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S030□	3.0	7.0	0.095	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S040□	4.0	6.0	0.106	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S4R7□	4.7	6.0	0.108	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S050□	5.0	6.0	0.111	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S060□	6.0	6.0	0.117	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S070□	7.0	6.0	0.122	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S080□	8.0	6.0	0.126	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S100□	10	5.0	0.194	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S120□	12	5.0	0.202	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S150□	15	4.0	0.231	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S160□	16	4.0	0.252	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S180□	18	4.0	0.267	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S200□	20	4.0	0.285	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S220□	22	4.0	0.317	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S250□	25	3.0	0.415	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S300□	30	3.0	0.449	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S330□	33	3.0	0.452	470	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S400□	40	3.0	0.500	1000	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S470□	47	3.0	0.524	1000	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S800□	80	2.5	0.699	680	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S121□	120	2.0	1.042	1000	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■
JNR15S221□	220	1.0	3.455	1500	3.7	Approx. 21	Approx. 80	-40 ~ +200	■	■	■

Note : □ = Tolerance of R25 (L = ±15% , M = ±20%)

Part No	Resistance at 25°C	I <sub>max</sub>	R <sub>lmax</sub>	Maximum Load Cap. AC240V	P <sub>max</sub> typical	Dissipation factor typical	Thermal time constant typical	Rated temperature	Safety	Approvals	
	(Ohms)	(Amps)	(Ω)	(μF)	(W)	δ(mW/°C)	(sec.)	T <sub>L</sub> ~ T <sub>U</sub> °C			
JNR20S0R7□	0.7	13.0	0.029	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S1R0□	1.0	13.0	0.037	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S1R3□	1.3	10.0	0.042	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S1R5□	1.5	10.5	0.042	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S2R0□	2.0	10.0	0.059	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S2R2□	2.2	9.5	0.066	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S2R5□	2.5	9.0	0.083	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S030□	3.0	8.5	0.076	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S040□	4.0	8.0	0.076	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S4R7□	4.7	7.5	0.116	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S050□	5.0	7.5	0.118	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S060□	6.0	7.0	0.120	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S6R8□	6.8	6.5	0.122	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S070□	7.0	6.5	0.124	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S080□	8.0	6.0	0.128	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S100□	10	6.0	0.135	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S120□	12	5.0	0.165	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S130□	13	5.0	0.179	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S150□	15	4.5	0.255	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S160□	16	4.5	0.263	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S180□	18	4.0	0.278	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S200□	20	4.0	0.308	1000	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR20S121□	120	2.0	1.075	1500	4.9	Approx. 28	Approx. 110	-40 ~ +200	■	■	■
JNR25S1R0□	1.0	15.0	0.034	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S1R5□	1.5	15.0	0.035	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S2R0□	2.0	14.5	0.036	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S2R5□	2.5	14.5	0.037	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S030□	3.0	14.5	0.038	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S040□	4.0	14.0	0.039	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S4R7□	4.7	13.0	0.040	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S050□	5.0	11.0	0.066	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S6R8□	6.8	10.5	0.070	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S070□	7.0	10.0	0.091	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S080□	8.0	9.0	0.096	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S100□	10	8.0	0.143	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S120□	12	7.5	0.165	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S150□	15	6.5	0.223	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S180□	18	5.5	0.234	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■
JNR25S200□	20	5.0	0.245	1200	7.0	Approx. 30	Approx. 130	-40 ~ +200	■	■	■

Note : □ = Tolerance of R25 (L = ±15% , M = ±20%)

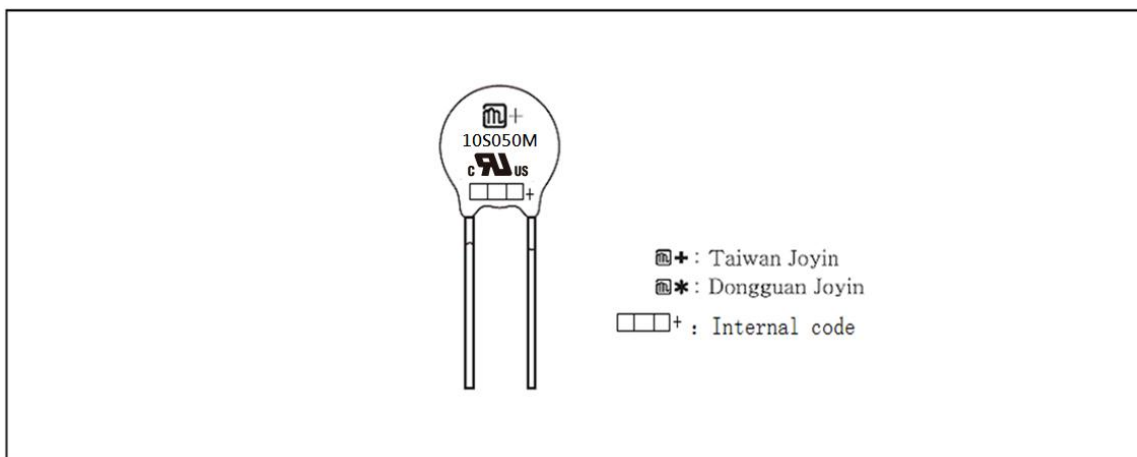
## Structure and Dimension



Unit in mm

Diameter	Ø 5mm	Ø 8mm	Ø 10mm	Ø 13mm	Ø 15mm	Ø 20mm	Ø 25mm
D max.	7.5	10.5	12.5	15.5	17.5	23.5	29.0
d ± 0.05	0.6/0.8	0.6/0.8	0.6/0.8	0.8/1.0	0.8/1.0	1.0	1.0
F ± 1.0	5.0	5.0	5.0/7.5	7.5	7.5/10	7.5/10	7.5/10
H max.	11.0	14.5	18.5	21.0	23.0	28.0	36.0
H1 max.	10.0	13.5	17.5	19.0	22.0	27.0	35.0
L min.	24.0	24.0	24.0	24.0	24.0	24.0	20.0
L1 min.	25.0	25.0	25.0	25.0	25.0	25.0	24.0
T max.	6.0	6.0	7.5	8.0	8.0	8.0	8.0

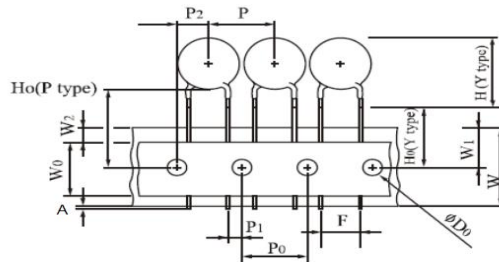
## MARKING



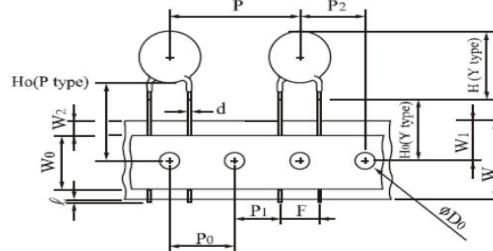
## Packaging

### Tape and Reel Dimensions

1/2" pitch



1.0" pitch

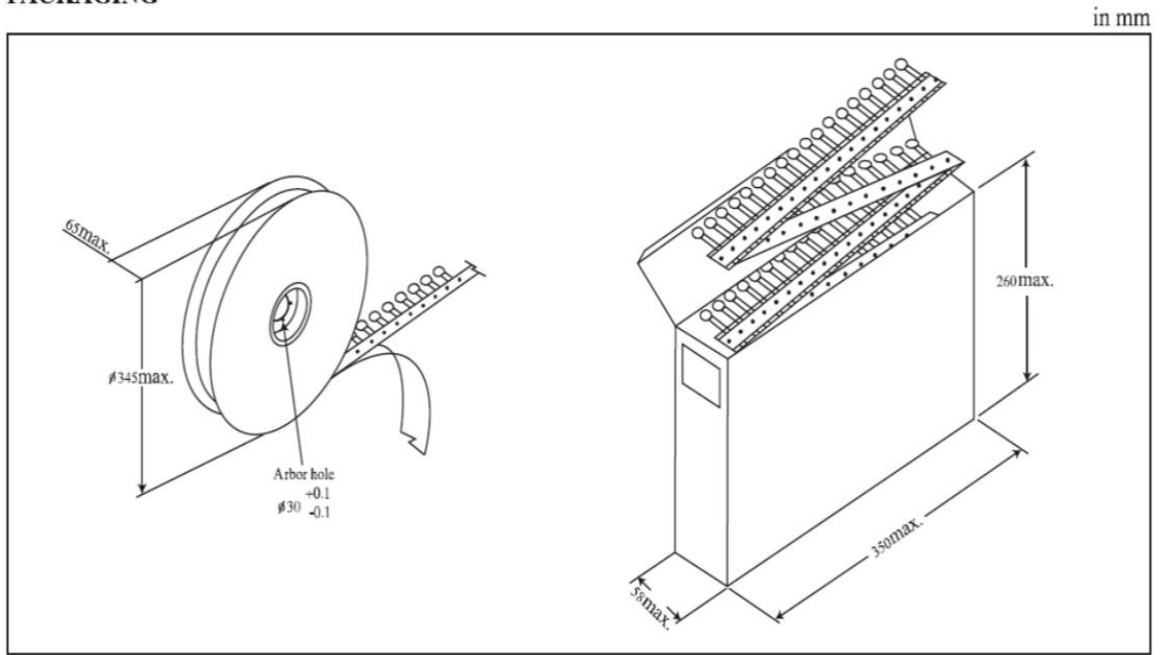


Symbols	Item	5 / 8/10 mm	8/10/13/15/20 mm	20/25 mm
A	Cut out length	1.1 mm max.	1.1 mm max.	
H (Y type)	Height of Top	See H max. table		
H0(Y type)	Height to seating plane	16.0 ± 0.5 mm (*± 1.0 mm)	16.0 ± 0.5 mm (*± 1.0 mm)	
H0(P type)	Height of component from hole center	16.0 ~ 21.0 mm	16.0 ~ 21.0 mm	
Δ h	Front to back deviation	0 ± 2.0 mm	0 ± 2.0 mm	
W	Carrier tape width	18 <sup>+1</sup> <sub>-0.5</sub> mm	18 <sup>+1</sup> <sub>-0.5</sub> mm	
W0	Hold down tape width	10.0 mm	12.0 mm	
W1	Sprocket hole position	9 <sup>+0.75</sup> <sub>-0.5</sub> mm	9 <sup>+0.75</sup> <sub>-0.5</sub> mm	
W2	Adhesive tape position	3.0 mm max.	3.0 mm max.	
F	Component lead spacing	5.0 ± 1.0 mm	7.5 ± 1.0 mm	10.0 ± 1.0 mm
P	Pitch of component	12.7 ± 1.0 mm	25.4 ± 1.0 mm	
P0	Sprocket hole pitch	12.7 ± 0.3 mm	12.7 ± 0.3 mm	
P1	Lead length from hole center to lead	3.85 ± 0.7 mm	8.95 ± 0.7 mm	7.7 ± 0.7 mm
P2	Length from hole center to disk center	6.35 ± 1.3 mm	12.7 ± 1.3 mm	
D0	Sprocket hole diameter	4.0 ± 0.2 mm	4.0 ± 0.2 mm	
d	Lead wire diameter	0.6 ± 0.05 mm	0.8 ± 0.05 mm	1.0 ± 0.05 mm
T	Disk thickness	See T max. table	See T max. table	
t1	Total thickness tape	0.7 ± 0.05 mm	0.7 ± 0.05 mm	
t2	Total thickness	1.6 mm max.	1.8 mm max.	

\* for manual line



## PACKAGING



## Quantity per Packing Unit

Packaging \ Diameter	Ø 5mm	Ø 8mm	Ø 10mm	Ø 13mm	Ø 15mm	Ø 20mm	Ø 25mm
Bulk (box)	5000	4000	1500-2500	1000-2000	750-1500	750-1000	450-750
Reel	1500	1500	750-1000	500-1000	500-750	500-750	-
Ammo	1500	1000	750-1000	500-1000	500-750	-	-

Packaging	Bulk (box)	Reel (5mm~10mm)	Reel (13mm~20mm)	Ammo (5mm,8mm)	Ammo (10mm~15mm)	Ammo (10mm~16mm)	Ammo (20mm)
Box size (mm)	290X155X110	350X350X108	350X350X74	330X240X46	343X210X52	343X260X52	343X220X58
Carton size (mm)	310X328X250	371X371X590	370X370X468	350X500X270	363X440X250	363X540X250	363X460X250
One carton with	4 Boxes	5 Boxes (10 reels)	6 Boxes (6 reels)	10 Boxes	8 Boxes	8 Boxes	8 Boxes