



# PTC THERMISTORS: TYPE YM120

## OVER-CURRENT PROTECTION

### DESCRIPTION:

A range of radially-wired PTC disc thermistors with black silicone resin coating.

### FEATURES:

- Designed for general purpose over-current, over-voltage and direct over-temperature protection
- Operation up to 265V rms
- Wide range of operating current levels
- Excellent stability
- Fail-safe operation
- Solid state
- High performance barium titanate ceramic
- Suitable for automatic PCB insertion

### OPTIONS:

- Non-standard resistances and tolerances
- Resistance matching
- Non-standard wire lengths
- Other wire configurations

### PACKAGING:

All types in the YM120 range are available loose-packed, as shown in the drawing. Devices are also available on bandolier (tape & reel): types with diameter a < 14.5mm comply with IEC 286-2.

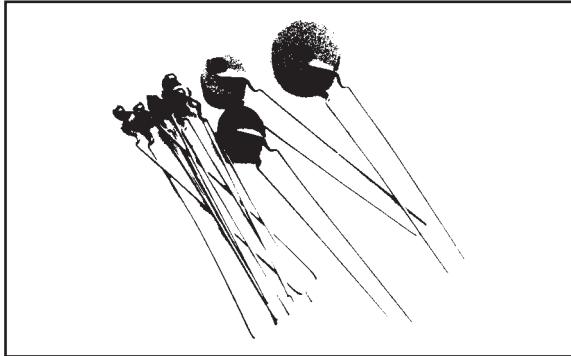
To identify the packaging required, replace X in the product codes shown in table as follows:

Bandoliered .....R  
Loose-packed .....N

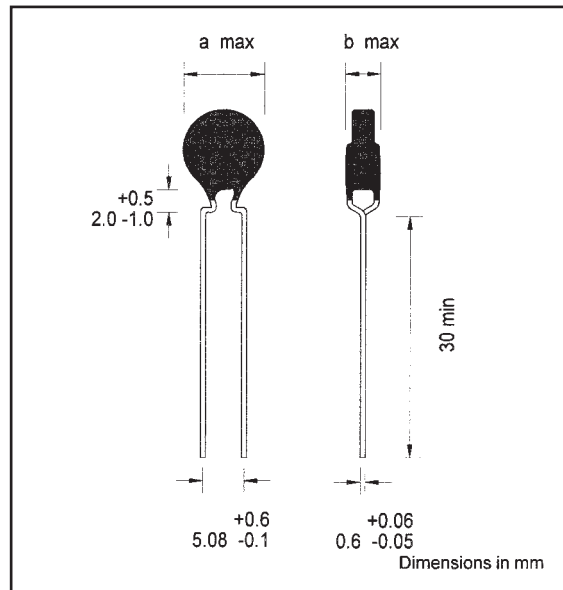
Pack quantities:

Loose-packed .....500/box  
Bandoliered

a < 14.5mm .....1000/reel (0.5" pitch)  
a ≥ 14.5mm .....500/reel (1" pitch)



### DIMENSIONS:



### DATA:

**Maximum operating voltage** .....265V rms  
**Switch temperature** .....120°C nominal  
**Tolerance on R<sub>25</sub>** .....±20%  
**Ambient temperature range:**  
**at maximum voltage** .....0 to +55°C  
**at zero voltage** .....-25 to +155°C  
**Lead wire material** .....Solder-coated copper  
**Body coating** .....Silicone resin



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Code	R <sub>25</sub> Ω	I <sub>nt</sub> A	I <sub>t</sub> A	I <sub>mo</sub> A	I <sub>r</sub> mA	a mm	b mm	Brand code
YM120C15X182	1800	0.016	0.023	0.1	5	4.0	4.5	D
YM120C20X122	1200	0.020	0.028	0.1	6	4.0	4.5	E
YM120C30X601	600	0.028	0.040	0.2	6	4.0	4.5	F
YM120C45X301	300	0.039	0.055	0.2	7	4.0	4.5	G
YM120C60X151	150	0.057	0.080	0.2	7	4.0	4.5	H
YM120C80X101	100	0.070	0.098	0.4	8	4.5	4.5	I
YM120D105X600	60	0.093	0.131	0.6	8	6.0	4.5	J
YM120D125X450	45	0.110	0.155	0.7	9	7.0	4.5	bTh 450
YM120D150X330	33	0.128	0.181	0.9	9	7.5	4.5	bTh 330
YM120D170X250	25	0.161	0.228	1.1	10	8.5	4.5	bTh 250
YM120D200X200	20	0.192	0.265	1.3	11	9.5	4.5	bTh 200
YM120D260X150	15	0.234	0.330	1.7	12	11.5	4.5	bTh 150
YM120D370X100	10	0.314	0.444	2.7	16	14.5	4.5	bTh 100
YM120D480X060	6	0.407	0.575	3.9	25	17.5	4.5	bTh 060

R <sub>25</sub>	Resistance at 25°C
I <sub>nt</sub>	Maximum current without tripping (25°C ambient)
I <sub>t</sub>	Minimum trip current (25°C ambient)
I <sub>mo</sub>	Maximum overload current
I <sub>r</sub>	Residual current (25°C ambient)

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