



PTC THERMISTORS: TYPE YS

OVER-CURRENT PROTECTION

DESCRIPTION:

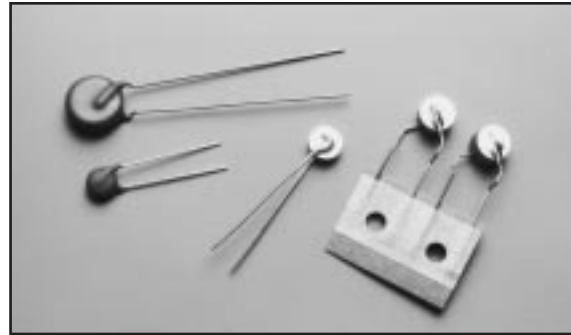
A range of high performance PTC thermistors designed primarily for protection of telecommunication systems and other demanding applications. Devices are available in unlead, leaded and SMD formats.

FEATURES:

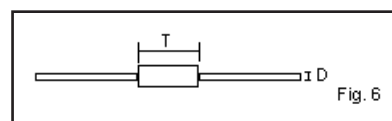
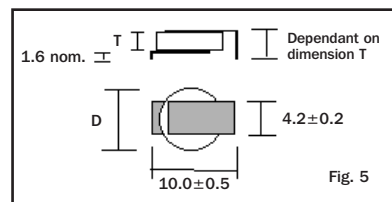
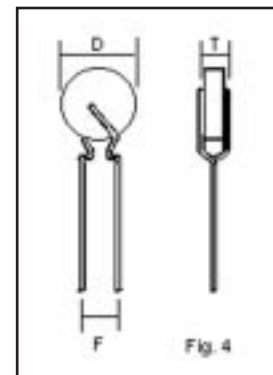
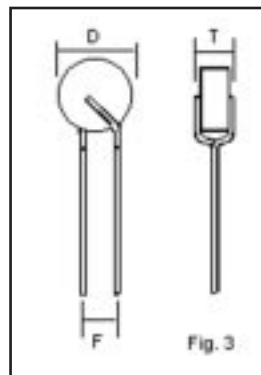
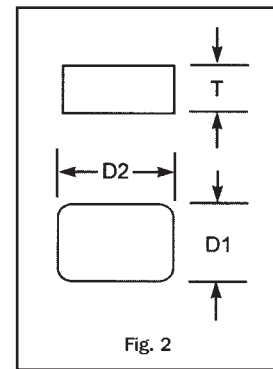
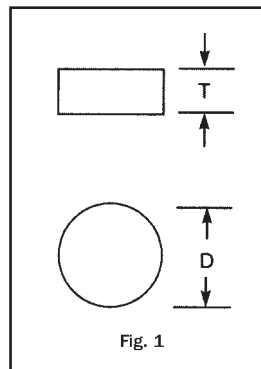
- Designed for over-current protection in demanding applications e.g. line protection
- Conformance to CCITT K20 (selected types)
- Operation at high voltage and current levels
- Excellent resistance stability
- Resistance matching
- Fail-safe operation
- Operation under harsh environmental conditions e.g. damp heat up to 85°C, 85% RH
- Solid state
- Range of termination materials
- Compatible with all common PCB assembly techniques
- Supplied on bandolier (tape and reel)
- No heat treatment required after soldering

OPTIONS:

- Non-standard resistances and tolerances
- Special current handling requirements
- Alternative termination configurations



DIMENSIONS:





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DATA:

Code	Fig.	R ₂₅ Ω	R ₂₅ Tolerance	R ₂₅ Matching	V _{max} V rms	Non-Trip Current		Trip Current		Trip Time (25°C)		D max mm	T max mm	F nom mm	I _{mo} A
						I (mA)	T °C	I (mA)	T °C	I initial (mA)	max (s)				
YS4245	1	10	±20%		250	160	25	300	25	1000	3.5	8.2	2.1	-	5
YS4295	1	10	±20%	1Ω	250	160	25	300	25	1000	3.5	8.2	2.1	-	5
YS3515	1	10	±20%	0.5Ω	265	100	70					8.5	2.45	-	4
YS4220	1	17.5	±14%	0.5Ω	250	120	25	220	25	1000	1.1	6.7	2.1	-	3
YS4247	1	20	+10/20%		250	115	25	220	25	1000	2.2	8.2	2.1	-	8
YS4298	1	20	+10/20%	1Ω	250	115	25	220	25	1000	2.2	8.2	2.1	-	8
YS4269	1	25	±20%		250	100	25	200	25	1000	2	8.2	2.1	-	12
YS3518	1	25	±20%	1Ω	265	70	70					8.5	2.45	-	5
YS2713	2	8.5	±17%	0.4Ω	250	150	65			450	80	7.4x11.4	2.8	-	2.7
YS3219	2	17.5	±2.5%	2Ω	250	150	20			1000	5	7.4x11.4	2.85	-	5
YS2544	3	14.7	±7%	0.5Ω	250	80	70			1000	8	10.9	8	5.00	5
YS849	3	25	±20%	2%	245	65	85			650	3.4	5.4	2.6	5.08	1
YS2827	3	25	±20%	2%	245	70	70	170	25	700	8	11	5	5.08	4.6
YS3424	3	25	±20%	2%	600	70	70	170	25			8.5	4	5.00	6
YS3854	3	30	±20%	0.8Ω	250	60	85			620	1.7	7	4.3	5.00	1
YS3419	3	35	±20%	0.8Ω	245	60	85			620	1.7	7	4.3	5.00	1
YS2880	3	35	±20%	3Ω	600	70	70	350	0	1000	5	5	5	5.08	4.6
YS3418	3	35	±20%		425	70	70	350	0	1000	5	8	4.2	5.08	5
YS2132	4	10	±20%	1Ω	245	140	55			350	180	11	4	5.08	5
YS958	4	15	+17/-13%	2%	245	92	85			400	44	9.5	6	5.08	1
YS936	4	16	±20%		245	140	55					11	4	5.08	5
YS2716	4	20	±20%	1Ω	245	150	70	300	10			11	6	5.08	1.6
YS2909	4	25	±15%	1Ω	245	70	70	220	25	220	60	8.2	3.8	5.08	3
YS2715	4	33	±20%	1Ω	245	75	70	150	10			7.5	6	5.08	1.1
YS3962	4	40	±15%	1Ω	245	70	70					8.2	3.8	5.08	8
YS850	4	70	+10/-15%		245	60	70			200	60	6.4	2.6	5.08	0.8
YS896	4	70	+10/-15%	3Ω	245	60	70			200	60	5.4	2.6	5.08	0.8
YSM3980	5	10	±15%	2%	285	173	25	257	25			8.35	2.4	-	4
YSM3981	5	12	±15%	2%	255	158	25	235	25			8.35	2.4	-	4
YSM3982	5	15	±15%	2%	265	141	25	210	25			8	2	-	6
YSM3018	5	18	±20%		245	140	40			5000	0.42	8	1.6	-	8
YSM3068	5	18	±20%	0.8Ω	300	108	70	300	0	1000	1.5	8	1.6	-	4.5
YSM3983	5	20	±15%	2%	265	122	25	182	25			8	1.6	-	9
YSM3985	5	20	±15%	2%	265	138	25	196	25			8	1.6	-	10
YSM3984	5	25	±15%	2%	265	109	25	163	25			8	1.6	-	10
YSM3986	5	25	±15%	2%	265	123	25	175	25			8	1.6	-	10
YSM3987	5	25	±15%	2%	265	123	25	175	25			8	2.5	-	10
YSM3988	5	40	±15%	2%	265	80	25	130	25			8	1.6	-	8
YSM3989	5	40	±15%	2%	265	97	25	140	25			8	1.6	-	8
TPJ	6	120	±25%		52	30	50	50	0			2.6	7.8	-	-

R ₂₅	Resistance at 25°C
V _{max}	Maximum operating voltage
I _T	Minimum trip current
I	Maximum current without tripping
T	Trip time
I _{mo}	Maximum overload current (at V _{max} unless stated otherwise)

The above table illustrates the typical range of specifications currently available. All of these parts have been custom designed to meet unique customer requirements. To discuss your specific application please contact your local Thermometrics sales office.

BOWTHORPE THERMOMETRICS
 Crown Industrial Estate, Priorswood Road
 Taunton, Somerset TA2 8QY UK
 Tel +44 (0) 1823 335200
 Fax +44 (0) 1823 332637

THERMOMETRICS, INC.
 808 US Highway 1
 Edison, New Jersey 08817-4695 USA
 Tel +1 (732) 287 2870
 Fax +1 (732) 287 8847

KEYSTONE THERMOMETRICS CORPORATION
 967 Windfall Road
 St. Marys, Pennsylvania 15857-3397 USA
 Tel +1 (814) 834 9140
 Fax +1 (814) 781 7969