



SEMITEC
SEMITEC Corporation



HIGH PRECISION THERMISTORS

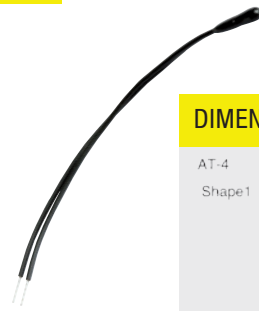
SEMITEC HIGH PRECISION THERMISTOR – AT-4 SERIES

FEATURES

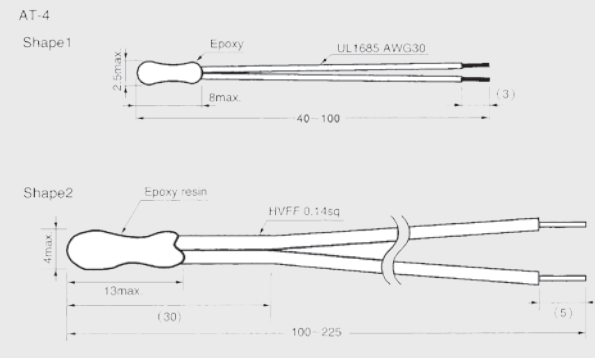
- » High-precision thermal sensing device
- » Extremely small tolerances of R_{25} and B-value
- » Insures temperature precision of $\pm 0.3^{\circ}\text{C}$
- » Category temperature range: $-30^{\circ}\text{C} \dots +90^{\circ}\text{C}$
- » Excellent long-term stability
- » Low time constants
- » Samples available ex stock

APPLICATIONS

- » Battery packs, heat meters
- » Precision temperature measuring and compensation
- » Temperature monitoring, medical equipment



DIMENSIONS AT-4 SERIES (mm)



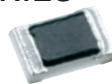
SPECIFICATIONS

- » 103AT-4 - R_{25} : $10\text{ k}\Omega \pm 1\%$, B-value: $3435\text{K} \pm 1\%$ (Shape 1)
- » 103AT-4 - R_{25} : $10\text{ k}\Omega \pm 1\%$, B-value: $3435\text{K} \pm 1\%$ (Shape 2)
- » 682AT-4 - R_{25} : $6.8\text{ k}\Omega \pm 1\%$, B-value: $3975\text{K} \pm 1\%$

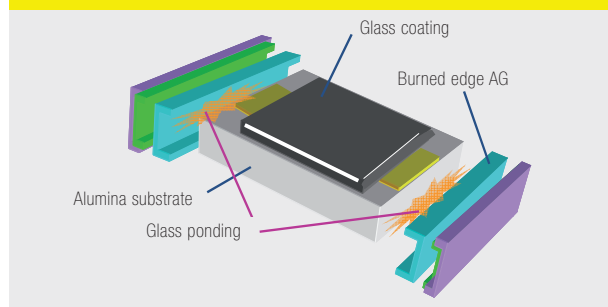
TATEYAMA THICK FILM CHIP THERMISTOR – TFT SERIES

FEATURES

- » High mechanical strength by alumina base & glass coating
- » Superior thermal responsiveness
- » Thin structure by thick film element & constant thickness with any resistance value
- » High quality and high reliability by TS 16949 certification



THICK FILM CHIP CONSTRUCTION



APPLICATIONS

- » Various temperature compensation
- » Printer, digital camera, battery pack, fuel cell
- » Air conditioner (room, car), information appliance

PARAMETER	SPECIFICATION
Chip type size	0201, 0402, 0603, 0805
Resistance value range	100 Ω ... 2 M Ω
Resistance value tolerance	$\pm 1\% \dots \pm 10\%$
B constant value range	2700 K ... 4800 K
B value tolerance	$\pm 1\% \dots \pm 5\%$
Power rating	5 mW
Dissipation constant (in air)	$\delta \leq 1.1 \dots 1.3\text{ mW}/^{\circ}\text{C}$
Thermal constant time (in air)	$\tau \leq 1.5 \dots 2.5\text{ s}$

Contact for information: Mr. Graf · Tel. +49(0)7452-6007- 941 · e-mail: o.graf@endrich.com

HEADQUARTERS

ENDRICH Bauelemente Vertriebs GmbH · P.O.Box 1251 · D-72192 Nagold
T +49 (0) 7452 6007-0 · F +49 (0) 7452 6007-70
endrich@endrich.com · www.endrich.com



SALES OFFICES IN EUROPE

France:

Angers: T +33/2 41 80 33 54 · v.rousseau@endrich.com
Paris: T +33/1 46 05 99 13 · e.cosperec@endrich.com

Austria & Slovenia

Vienna: T +43/1 66 52 52 521 · a.schwaha@endrich.com

Hungary/Bulgaria:

Budapest: T +361 / 2 97 41 91 · z.kiss@endrich.com

Switzerland – Novitronic:

Zurich: T +41/44 306 91 91 · info@novitronic.ch

Spain:

Barcelona: T +34/93 217 31 44 · spain@endrich.com