## **DO–35 Series Thermistor**



#### Introduction

The rugged construction of the DO-35 package is ideally suited for applications which cover the temperature range, PC board mounting from -40°C to +250°C with leads that are suitable f or welding or soldering. The glass package hermetically seals to the metal leads which protects the thermistor element from extreme environmental conditions. The axial leads make this device a perfect choice for PC board mounting and the leads are plated giving a temperature rating to +250℃. The standard devices are specified as ± 1%,± 3% and ± 5% at 25°C.

# Shape and Dimensions



#### Features

- ·Hermetically sealed element. Glass
- metal package.

#### • Axial leads

- High temperature devices for
- applications to +250℃
- Time constant 8 seconds in air
- Dissipation constant 2.5mW/℃ in air at 25℃
- · RoHS Compliant

#### Applications

- Low cost probe assemblies
- · High temperature printer ink sensors
- Consumer Electronics
- · High temperature high-speed
- manufacturing
- Printed circuit board temperature sensing
- Air Conditioning

Part Numbering System 5K F 3550 DP G S Plating Material S = Tin N = Nickel Beta Tolerance  $G = \pm 2\%$  $H = \pm 3\%$ DO-35 Package 25/85 Beta V alue = 3550K Resistance Tolerance @ 25°C  $F = \pm 1\%$  $H = \pm 3\%$ Resistance V alue @ 25°C in Kohms = 5,000  $J = \pm 5\%$ 

### Electrical Specifications

BetaTherm Part	Resistance @	Tolerance	Beta Value	Beta	Dissipation Constant (Still Air @	T.C. Constant (Still
Number	+25℃	@+25°C	25/85	Tolerance	+25℃)	Air)
5KF3550DPGS*	5,000^	±1%	3550	±2%	2.5mW/℃ Typ.	7 Seconds
10KF3270DPGN	10,000∧	±1%	3270	±2%	2.5mW/°C Typ.	7 Seconds
10KF3435DPGS*	10,000∧	±1%	3435	± 2%	2.5mW/℃ Typ.	7 Seconds
10KF3550DPGN	10,000∧	±1%	3550	± 2%	2.5mW/℃ Typ.	7 Seconds
10KF3700DPGN	10,000∧	±1%	3700	± 2%	2.5mW/℃ Typ.	7 Seconds
10KF3950DPGN	10,000∧	±1%	3950	± 2%	2.5mW/℃ Typ.	7 Seconds
10KF3960DPGN	10,000∧	±1%	3960	± 2%	2.5mW/℃ Typ.	7 Seconds
10KF3975DPGS*	10,000∧	±1%	3975	± 2%	2.5mW/℃ Typ.	7 Seconds
20KF3960DPGN	20,000	±1%	3960	± 2%	2.5mW/℃ Typ.	7 Seconds
50KF3950DPGN	50,000^	±1%	3950	± 2%	2.5mW/℃ Typ.	7 Seconds
50KF3960DPGN	50,000^	±1%	3960	± 2%	2.5mW/℃ Typ.	7 Seconds
100KF3975DPGN	100,000^	±1%	3975	± 2%	2.5mW/℃ Typ.	7 Seconds
100KF4300DPGN	100,000^	±1%	4300	± 2%	2.5mW/℃ Typ.	7 Seconds
200KF4000DPGN	200,000	±1%	4000	± 2%	2.5mW/℃ Typ.	7 Seconds

\*Parts only available in Tin Plating

Material Type	Operating Temperature
Tin Plating	-40℃ to +200°C
Nickel Plating	-40℃ to +250°C

## Reliability Information

Reliability Tests	Standard	Test Condition	Delta R
Storage in Dry Heat	IEC 60068-2-2	Storage temperature: 200°C & 250°C Duration: 1000 hours	< 3%
Storage in Damp Heat	IEC 60068-2-3	Temperature of air is 40°C & RH 93% Duration: 56 days.	< 2%
Rapid Temperature Cycling	IEC 60068-2-14	Lower Test Temperature –55℃ Upper Test Temperature +200℃ Number of Cycles 50	< 2%

## Packaging Information

All parts supplied loose

Parts are available on Tape and Reel upon customer request

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