# Type 95 Epoxy-Coated Interchangeable NTC Thermistors



### **Features**

- Precision, solid state temperature sensor
- Interchangeability down to ±0.18°F (±0.1°C)
- Suitable for use over a range of -112°F to 302°F (–80°C to 150°C)
- High sensitivity, greater than –4%/°C at 77°F (25°C)
- Suitable for temperature measurement, control and compensation
- High reliability and stability over an interchangeable range

- Most popular Resistance (R) vs Temperature (T) curves are available
- Resin-coated for mechanical strength and resistance to solvents
- Rugged construction
- DC95: 0.012 in (0.3mm) diameter, bare tinned copper lead wires
- EC95: 0.008 in (0.2mm) diameter, bare tinned Cu-Ni alloy lead wires
- TK95: 0.010 in (0.25mm) diameter, PTFE/ PFA Cu-Ni alloy lead wires



# Type DC95 Specifications

# **Description**

Epoxy-coated interchangeable NTC thermistor chips with bare tinned copper lead wires.

# **Options**

### **Consult Factory for Availability of Options:**

- Other resistance values in the range of 1000  $\Omega$  to 100  $k\Omega$
- Other tolerances or ranges
- Alternative lead wires or lengths
- Non-standard R vs T curves
- · Controlled dimensions
- Special sensor assemblies or enclosures

# **Thermal and Electrical Properties**

### **Dissipation Constant**

Still air: 1 mW/°C Stirred oil: 8 mW/°C

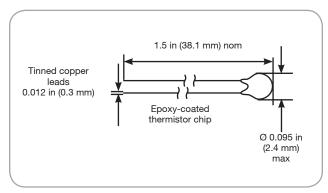
### **Thermal Time Constant**

Still air: 10 seconds
Stirred oil: 1 second

### Maximum Power at 77°F (25°C)

75 mW

De-rated from 100% at 77°F (25°C) to 0% at 212°F (100°C)



Type DC95 Dimensions

# **Ordering Information**

Select appropriate part number below for resistance and temperature tolerance desired.

Material System	32°F to 158°F (0°C to 70°C) ±0.18°F (±0.1°C)	32°F to 158°F (0°C to 70°C) ±0.36°F (±0.2°C)	32°F to 212°F (0 to 100°C) ±0.36°F (±0.2°C)
F	DC95F202V	DC95F202W	DC95F202Z
F	DC95F232V	DC95F232W	DC95F232Z
F	DC95F302V	DC95F302W	DC95F302Z
F	DC95F502V	DC95F502W	DC95F502Z
F	DC95F103V	DC95F103W	DC95F103Z
Υ	DC95Y103V	DC95Y103W	DC95Y103Z
Н	DC95H303V	DC95H303W	DC95H303Z
G	DC95G503V	DC95G503W	DC95G503Z
Υ	DC95Y104V	DC95Y104W	DC95Y104Z
G	DC95G104V	DC95G104W	DC95G104Z
	F F F Y H G	Material System         (0°C to 70°C) ±0.18°F (±0.1°C)           F         DC95F202V           F         DC95F232V           F         DC95F302V           F         DC95F502V           F         DC95F103V           Y         DC95Y103V           H         DC95H303V           G         DC95G503V           Y         DC95Y104V	Material System         (0°C to 70°C) ±0.18°F (±0.1°C)         (0°C to 70°C) ±0.36°F (±0.2°C)           F         DC95F202V         DC95F202W           F         DC95F232V         DC95F232W           F         DC95F302V         DC95F302W           F         DC95F502V         DC95F502W           F         DC95F103V         DC95F103W           Y         DC95Y103V         DC95Y103W           H         DC95H303V         DC95H303W           G         DC95G503V         DC95G503W           Y         DC95Y104V         DC95Y104W

### Notes:

- 1. For RoHS compliant product, please add the suffix "N" to the part label. *Example: DC95F103VN.*
- 2. For RoHS compliant product with applications below 0°C, please add the suffix "H" to the part label. *Example: DC95F103VH*

# Type EC95 Specifications

## **Description**

Epoxy-coated interchangeable NTC thermistor chips with bare tinned 180 alloy lead-wires.

# **Options**

### **Consult Factory for Availability of Options:**

- Other resistance values in the range of 1000  $\Omega$  to 100 k $\Omega$
- Other tolerances or ranges
- · Alternative lead-wires or lengths
- Non-standard R vs T curves
- Controlled dimensions
- Special sensor assemblies or enclosures

# Tinned alloy 180 leads Ø 0.008 in (0.20 mm) Epoxy-coated thermistor chip Ø 0.095 in (2.4 mm) max

Type EC95 Dimensions

# **Thermal and Electrical Properties**

### **Dissipation Constant**

Still air: 1 mW/°C Stirred oil: 8 mW/°C

### **Thermal Time Constant**

Still air: 10 seconds
Stirred oil: 1 second

### Maximum Power at 77°F (25°C)

75 mW

De-rated from 100% at 77°F (25°C) to 0% at 212°F (100°C)

# **Ordering Information**

Select appropriate part number below for resistance and temperature tolerance desired.

R <sub>25°C</sub>	Material System	-4°F to 122°F (-20°C to 50°C) ±0.36°F (±0.2°C)	32°F to 158°F (0°C to 70°C) ±0.18°F (±0.1°C)	32°F to 158°F (0 to 70°C) ±0.36°F (±0.2°C)	32°F to 212°F (0 to 100°C) ±0.36°F (±0.2°C)
2252	F	EC95F232U	EC95F232V	EC95F232W	EC95F232Z
3000	F	EC95F302U	EC95F302V	EC95F302W	EC95F302Z
5000	F	EC95F502U	EC95F502V	EC95F502W	EC95F502Z
10000	F	EC95F103U	EC95F103V	EC95F103W	EC95F103Z
10000	Υ	EC95Y103U	EC95Y103V	EC95Y103W	EC95Y103Z
30000	Н	EC95H303U	EC95H303V	EC95H303W	EC95H303Z
50000	G	EC95G503U	EC95G503V	EC95G503W	EC95G503Z
100000	G		EC95G104V	EC95G104W	EC95G104Z

### Notes:

- 1. For RoHS compliant product, please add the suffix "N" to the part label. Example: EC95F103VN
- For RoHS compliant product with applications below 0°C, please add the suffix "H" to the part label. Example: EC95F103VH

# Type TK95 Specifications

# **Description**

Epoxy-coated interchangeable NTC thermistor chips with PTFE/PFA insulated nickel lead-wires. RoHS compliant.

# **Options**

### **Consult Factory for Availability of Options:**

- Other resistance values in the range of 1000  $\Omega$  to 100  $k\Omega$
- Other tolerances or ranges
- · Alternative lead wires or lengths
- Non-standard R vs T curves
- Controlled dimensions
- Special sensor assemblies or enclosures

# **Thermal and Electrical Properties**

### **Dissipation Constant**

Still air: 1.5 mW/°C Stirred oil: 8 mW/°C

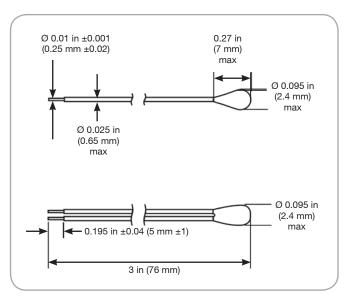
### **Thermal Time Constant**

Still air: 10 seconds
Stirred oil: 1 second

### Maximum Power at 77°F (25°C)

75 mW

De-rated from 100% at 77°F (25°C) to 0% at 212°F (100°C)



Type TK95 Dimensions

# **Ordering Information**

Select appropriate part number below for resistance and temperature tolerance desired.

R <sub>25°C</sub>	Material System	32°F to 158°F (0°C to 70°C) ±0.18°F (±0.1°C)	32°F to 158°F (0°C to 70°C) ±0.36°F (±0.2°C)
2000	F	TK95F202V	TK95F202W
2252	F	TK95F232V	TK95F232W
3000	F	TK95F302V	TK95F302W
5000	F	TK95F502V	TK95F502W
10000	F	TK95F103V	TK95F103W
10000	Υ	TK95Y103V	TK95Y103W
30000	Н	TK95H303V	TK95H303W
50000	G	TK95G503V	TK95G503W
100000	G	TK95G104V	TK95G104W

### Notes:

- 1. Part labels are RoHS compliant by exemptions 7(a) and 7(c)-1 as listed. Solder is 93.5Pb5Sn1.5Ag at a higher melt point than the Pb-free version. For use for optimum low temperature performance, where resistance to higher temperatures may be required and for applications where requalification with different solders is not an alternative.
- 2. Please add the suffix "N" to the part label for RoHS complaint by exemption 7(c)-1. Example: TK95F103VN. Solder is 97SC Pb-free.

\*Note: Both parts are classified RoHS compliant.



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