

T H E R M O M E T R I C S  
A C O M M I T M E N T T O E X C E L L E N C E

# NTC

## Interchangeable

## Type 65 Series

### Thermometrics

### Thermistors



#### Features

- Precision, solid state temperature sensor
- For MC65: Interchangeability down to  $\pm 0.09^{\circ}\text{F}$  ( $\pm 0.05^{\circ}\text{C}$ )
- For MF65: Interchangeability down to  $\pm 0.18^{\circ}\text{F}$  ( $\pm 0.10^{\circ}\text{C}$ )
- Suitable for use over range of  $-40^{\circ}\text{F}$  to  $221^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $105^{\circ}\text{C}$ )
- High sensitivity greater than  $-4\%/^{\circ}\text{C}$  at  $77^{\circ}\text{F}$  ( $25^{\circ}\text{C}$ )
- Suitable for temperature measurement, control and compensation
- High reliability and stability over interchangeable range
- Most popular Resistance (R) vs Temperature (T) curves are available
- Special tight tolerances in the clinical range for medical applications for MC65
- For MC65: Resin coated for good mechanical strength and resistance to solvents
- 0.004 in (0.1 mm) diameter heavy isomid insulated bifilar nickel lead wires
- For MF65: Fluidized bed epoxy-coated for good mechanical strength and resistance to solvents

**Amphenol**  
**Advanced Sensors**

# Type MC65

## Specifications

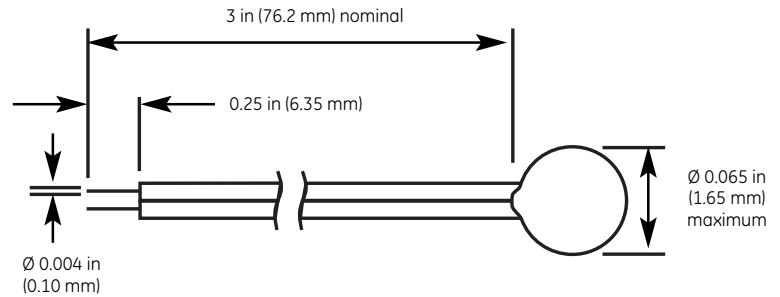
### NTC Interchangeable Type MC65

Epoxy-coated interchangeable chip thermistors with heavy isomid insulated nickel 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
- Other lead wires or lengths
- Non standard R vs T curves
- Controlled dimensions



NTC Interchangeable Type MC65 Dimensions

## Thermal and Electrical Properties

### Dissipation Constant

Still air: 0.5 mW/°C

Stirred oil: 4 mW/°C

### Thermal Time Constant

Still air: 8 seconds

Stirred oil: 0.5 seconds

### Maximum Power at 77°F (25°C)

25 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.

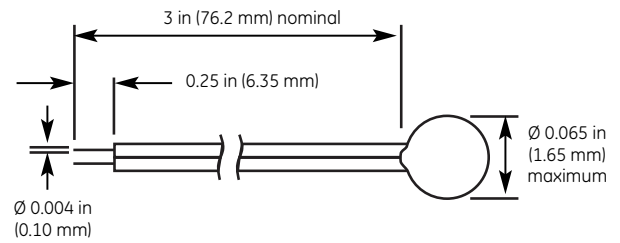
R <sub>25°C</sub>	Material System	±0.05°C; 35°C to 39°C ±0.075°C; 39°C to 42°C ±0.10°C; 20°C to 45°C ±0.15°C; 0°C to 50°C	±0.1°C; 35°C to 39°C ±0.15°C; 20°C to 45°C ±0.2°C; 0°C to 50°C	±0.15°C; 35°C to 39°C ±0.2°C; 20°C to 45°C ±0.25°C; 0°C to 50°C
2252	F	MC65F232A	MC65F232B	MC65F232C
3000	F	MC65F302A	MC65F302B	MC65F302C
5000	F	MC65F502A	MC65F502B	MC65F502C
10000	F	MC65F103A	MC65F103B	MC65F103C
10000	Y	MC65Y103A	MC65Y103B	MC65Y103C
30000	H	MC65H303A	MC65H303B	MC65H303C
50000	G	MC65G503A	MC65G503B	MC65G503C
100000	Y	MC65Y104A	MC65Y104B	MC65Y104C
100000	G	MC65G104A	MC65G104B	MC65G104C

Note: For RoHS compliant product, please add the suffix "N" to the part label. Example: MC65F103AN

# Type MF65 Specifications

## NTC Interchangeable Type MF65

Epoxy-coated interchangeable chip thermistors with heavy isomid insulated nickel lead-wires.



NTC Interchangeable Type MF65 Dimensions

## Options

### Consult Factory for Availability of Options

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

## Thermal and Electrical Properties

### Dissipation Constant

Still air: 0.5 mW/ $^{\circ}$ C  
Stirred oil: 4m W/ $^{\circ}$ C

### Thermal Time Constant

Still air: 8 seconds  
Stirred oil: 0.5 seconds

### Maximum Power at 77°F (25°C)

25mW  
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.

$R_{25^{\circ}\text{C}}$	Material System	$\pm 0.18^{\circ}\text{F}$ ( $\pm 0.1^{\circ}\text{C}$ ); 32°F to 158°F (0°C to 70°C)
3000	F	MF65F302V

Note: For RoHS compliant product, please add the suffix "N" to the part label. Example: MF65F302VN

**Amphenol**  
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