



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

# Type PTO Series

## Thermometrics PTC Thermistors



### Description

Thermometrics PTO series consists of a range of radially-wire bare PTC disc thermistors.

### Features

- Low cost solid state sensor
- Available in a broad range of resistances, transition temperatures and voltage ratings
- Exhibits large positive increases in resistance with temperature
- Resistance/temperature characteristic is infinitely repeatable and has no hysteresis associated with its action
- Proven quality and reliability over many years of manufacturing

### Applications

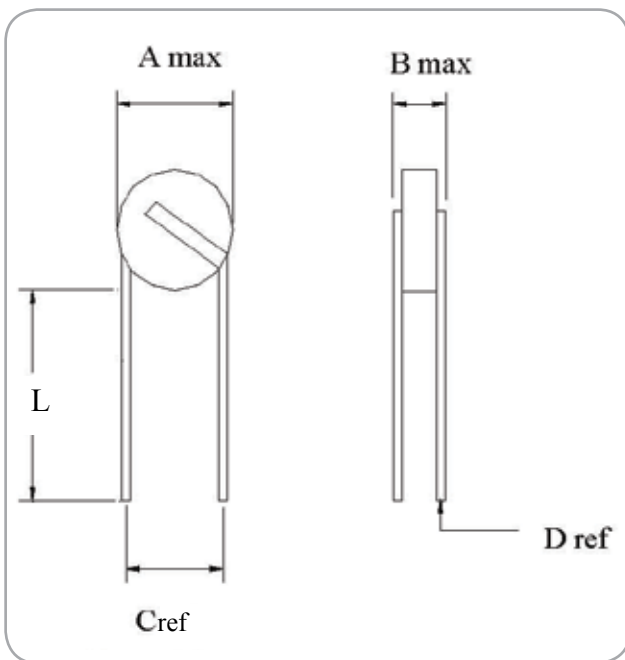
- Current regulation
- Circuit protection
- Temperature measurement and control

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**Advanced Sensors**

| Operating Voltage, $V_{max}$ | Part Number | Replacement for                     | R @ 25°C ( $\pm 30\%$ )<br>$\Omega$ | Switch Temperature, $T_b$ | A (max) mm | B (max) mm | C (ref) mm | D (ref) mm | L (min) mm |
|------------------------------|-------------|-------------------------------------|-------------------------------------|---------------------------|------------|------------|------------|------------|------------|
| 12                           | YQS5893PTO  | YS5893PTO (RL5305-2.5-110-12-PTO)   | 2.5                                 | 120°C                     | 15.24      | 4.06       | 5.0        | 0.6        | 25         |
| 12                           | YQS5898PTO  | YS5898PTO (RL3005-25-110-12-PTO)    | 25                                  | 120°C                     | 8.89       | 3.81       | 5.0        | 0.6        | 25         |
| 25                           | YQS5745PTO  | YS5745PTO (RL3006-50-30-25-PTO)     | 50                                  | 43°C*                     | 8.89       | 3.81       | 5.0        | 0.5        | 25         |
| 25                           | YQS5749PTO  | YS5749PTO (RL3006-50-80-25-PTO)     | 50                                  | 80°C                      | 8.89       | 3.81       | 5.0        | 0.5        | 25         |
| 25                           | YQS5750PTO  | YS5750PTO (RL3006-50-90-25-PTO)     | 50                                  | 90°C                      | 8.89       | 3.81       | 5.0        | 0.5        | 25         |
| 25                           | YQS5751PTO  | YS5751PTO (RL3006-50-100-25-PTO)    | 50                                  | 100°C                     | 8.89       | 3.81       | 5.0        | 0.5        | 25         |
| 120                          | YQS5917PTO  | YS5917PTO (RL6010-20-120-120-PTO)   | 20                                  | 120°C                     | 16.51      | 5.84       | 8.38       | 0.8        | 38.1       |
| 120                          | YS5918PTO   | RL5510-25-60-120-PTO                | 25                                  | 60°C                      | 15.24      | 5.59       | 8.38       | 0.8        | 38.1       |
| 120                          | YS5921PTO   | RL2510-200-110-120-PTO              | 200                                 | 120°C                     | 7.62       | 5.08       | 3.81       | 0.6        | 38.1       |
| 240                          | YQS5925PTO  | YS5925PTO (RL6015-100-120-240-PTO)  | 100                                 | 120°C                     | 16.51      | 6.86       | 8.38       | 0.8        | 38.1       |
| 240                          | YQS5930PTO  | YS5930PTO (RL3020-3000-100-240-PTO) | 3K                                  | 110°C                     | 8.89       | 7.87       | 6.35       | 0.8        | 25         |
| 480                          | YQS5934PTO  | YS5934PTO (RL3020-5K-100-480-PTO)   | 5K                                  | 102°C                     | 8.89       | 7.62       | 6.35       | 0.8        | 25         |

\*Resistance = 2 x Resistance at 25°C

## Mechanical Specifications



## Electrical Specifications

### Ambient Temperature Range

**At Storage:** -25 to +155°C

**At Maximum Voltage:** +10 to +55°C

### Construction

Bare ceramic disc  
Thick silver film electrodes  
Uninsulated leadwires

### Terminations

Straight type, tin coated copper wire

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Advanced Sensors

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