

## MEAS | MEAS TS

TE Internal #: G-TPCO-032

TE Internal Description: Analog Thermopile TO-18, FOV 110,NTC

Ref

Analog Infrared (IR) Thermopile Sensor

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Model Number: TS318-11C55

Thermopile Infrared Sensor Type: Thermopile Temperature Element

Thermopile Infrared Sensor Package: TO-18

Thermopile Infrared Sensor Wire Length: 13.5 mm [.53 in]

TP Voltage (T\_BB/T\_amb):  $5 \pm 1.3 \text{ mV}$ 

All Analog Infrared (IR) Thermopile Sensor (3)

## **Features**

| Product Type Features                  |                                |
|--|--------------------------------|
| Wire/Cladding Type                     | Metal Pin                      |
| Model Number                           | TS318-11C55                    |
| Thermopile Infrared Sensor Type        | Thermopile Temperature Element |
| Filter Type                            | Broad Band Pass 8-14µm         |
| Electrical Characteristics             |                                |
| TP Voltage (T_BB/T_amb)                | $5 \pm 1.3 \text{ mV}$         |
| Dimensions                             |                                |
| Thermopile Infrared Sensor Wire Length | 13.5 mm[.53 in]                |
| Thermopile Infrared Sensor Diameter    | 5.3 mm[.21 in]                 |
| Thermopile Infrared Sensor Length      | 2.7 mm[.106 in]                |
| Usage Conditions                       |                                |
| TCR (at T1/T2) for RTD                 | 6178 ± 150 ppm/°K              |
| Ambient Temperature Range              | -20 - 85 °C[-4 - 185 °F]       |
| Ambient Temperature Range              | -20 - 03 C[-4 - 103 T]         |

-40 - 300 °C

100/25 °C

 $70 \pm 30 \text{ k}\Omega$ 

Target T\_Object Range

TP Resistance (at T\_ref)

T\_BB/T\_amb for TP Voltage



| Thermistor Type                    | NTC                          |
|------------------------------------|------------------------------|
| R_Thermistor (at T_ref)            | $1 \pm .004 \text{ k}\Omega$ |
| T_ref for R_Thermistor             | 0 °C                         |
| T1/T2 for TCR of RTD               | 0 – 100 °C                   |
| Operation/Application              |                              |
| T_BB/T_amb Responsivity            | +100 and +25 °C              |
| Responsivity (T_BB/T_amb)          | 122                          |
| T_ref for TP Resistance            | 25 °C                        |
| Packaging Features                 |                              |
| Thermopile Infrared Sensor Package | TO-18                        |
| Other                              |                              |
| Field of View at FWHM              | 110°                         |
| Optics                             | Flat Window                  |

## **Product Compliance**

For compliance documentation, visit the product page on TE.com>

| EU RoHS Directive 2011/65/EU                  | Compliant  |
|---|--|
| EU ELV Directive 2000/53/EC                   | Not Yet Reviewed   |
| China RoHS 2 Directive MIIT Order No 32, 2016 | No Restricted Materials Above Threshold  |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JUL 2021 (219) Candidate List Declared Against: JAN 2021 (211) SVHC > Threshold: Not Yet Reviewed |
| Halogen Content                               | Not Yet Reviewed for halogen content   |
| Solder Process Capability                     | Not reviewed for solder process capability   |

## Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides



on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: https://echa.europa.eu/guidance-documents/guidance-onreach

# Compatible Parts









## Also in the Series | MEAS TS



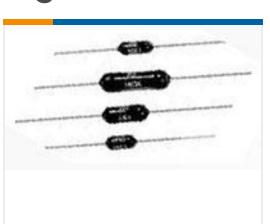
Digital Component Sensors(3)



# Customers Also Bought



TE Part #1744418-5 5 POS EP 2.5 HDR, GLOW WIRE



TE Part #1-1879627-1 H4P 27R 1% 100PPM











TE Part #1393725-9 C42334A 43A 6=RP622 FEDERLEI







## **Documents**

### **CAD Files**

3D PDF

3D

**Customer View Model** 

ENG\_CVM\_CVM\_G-TPCO-032\_A.2d\_dxf.zip

English

**Customer View Model** 

ENG\_CVM\_CVM\_G-TPCO-032\_A.3d\_igs.zip

English

**Customer View Model** 

ENG\_CVM\_CVM\_G-TPCO-032\_A.3d\_stp.zip

English

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## Datasheets & Catalog Pages

Datasheet Analog Infrared Thermopiles

English