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G-TPCO-031 ✔ ACTIVE

MEAS | MEAS TS

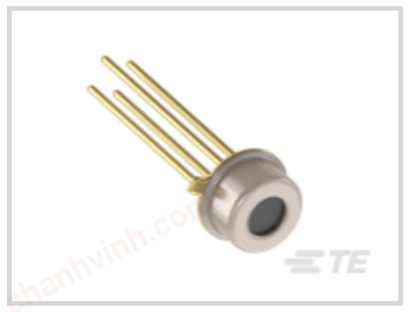
TE Internal #: G-TPCO-031

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

Analog Infrared (IR) Thermopile Sensor

View on TE.com >

Sensors > Temperature Sensors > Thermopile Infrared Sensors > Analog Infrared (IR) Thermopile Sensor



Model Number: **TS318-1B0814**

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): **8.4 ± 2.1 mV**

All Analog Infrared (IR) Thermopile Sensor (3)

Features

Product Type Features

Wire/Cladding Type	Metal Pin
Model Number	TS318-1B0814
Thermopile Infrared Sensor Type	Thermopile Temperature Element
Filter Type	Long Wave Pass 5.5µm

Electrical Characteristics

TP Voltage (T_BB/T_amb)	8.4 ± 2.1 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

Ambient Temperature Range	-20 – 85 °C[-4 – 185 °F]
Target T_Object Range	-40 – 300 °C
T_BB/T_amb for TP Voltage	100/25 °C
TP Resistance (at T_ref)	70 ± 30 kΩ
Thermistor Type	Nickel-RTD

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R_Thermistor (at T_ref)	100 ± 5 kΩ
T_ref for R_Thermistor	25 °C
T1/T2 for β-Value of NTC	0 – 50 °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
β-Value (at T1/T2) NTC	3955 %

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

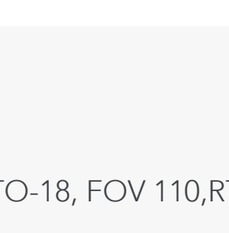
Product Compliance Disclaimer

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

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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-on-reach

Compatible Parts



TE Part # CAT-IR0001
Analog Infrared (IR) Thermopile Sensor

TE Part # G-TPCO-035
TS418-1N426

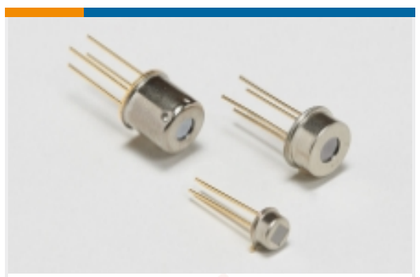
TE Part # G-TPMO-014
TSEV0108L39

TE Part # G-TPCO-019
TS105-10L5.5MM

Also in the Series | MEAS TS

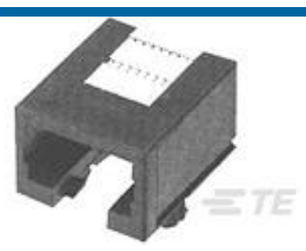


Digital Component Sensors(3)

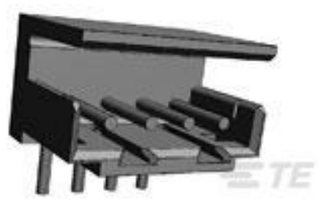


Thermopile Infrared Sensors(9)

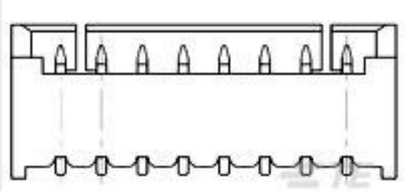
Customers Also Bought



TE Part #215875-1
4/4 PCB MOD.JACK SE



TE Part #1-292250-0
CT P/HDR BOX H ASSY 10P W/KINK



TE Part #1734829-2
1.25 WTB HDR DIP, 2 POS



TE Part #2-327960-1
TERMINAL,PIDG RECT 12-10 6



TE Part #2-2176055-3
RLP73N 2B R082 1% 1K RL



TE Part #20009605-11
FX293X-040B-0100-L

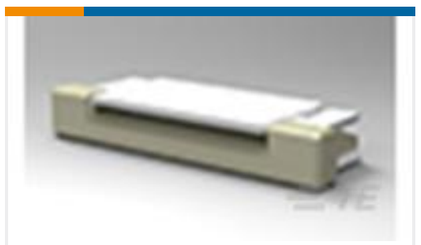


TE Part #1744426-9
Header Housing Assy, EP 2.5 RA, 9 Pos.

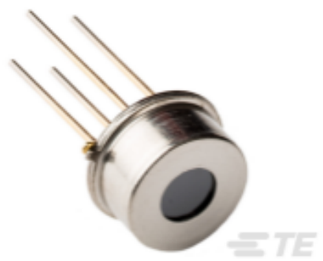


TE Part #2132415-9
EP2.5 Shrouded HDR ASSY 9P VERT w /o boss

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TE Part #2-1734839-1
FPC CONN. 0.5MM PITCH T/C,21P



TE Part #G-TPMO-101
TSD305-1C55 Digital Thermopile Sensor

Documents

CAD Files

3D PDF

3D

Customer View Model
ENG_CVM_CVM_G-TPCO-031_A.2d_dxf.zip

English

Customer View Model
ENG_CVM_CVM_G-TPCO-031_A.3d_igs.zip

English

Customer View Model
ENG_CVM_CVM_G-TPCO-031_A.3d_stp.zip

English

By downloading the CAD file I accept and agree to the Terms and Conditions of use.

Datasheets & Catalog Pages

Datasheet Analog Infrared Thermopiles

English