



MEAS | MEAS TS

TE Internal #: G-TPCO-033

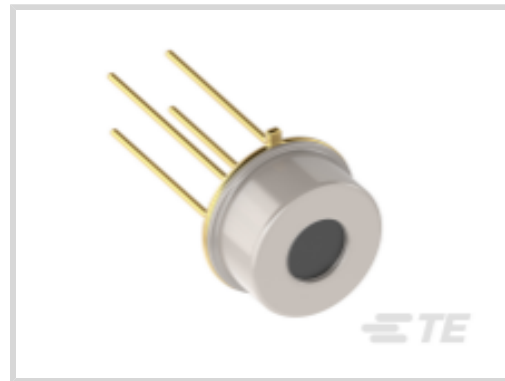
TE Internal Description: Analog Thermopile TO-05, FOV 88, NTC

Ref

IR Sensors: Analog

[View on TE.com >](#)

Sensors > Temperature Sensors > Thermopile Infrared Sensors > IR Sensors: Analog



Model Number: **TS305-11C55**

Thermopile Infrared Sensor Type: **Thermopile Temperature Element**

Thermopile Infrared Sensor Package: **TO-5**

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

TP Voltage (T_BB/T_amb): **7 ± 2.1 mV**

[All IR Sensors: Analog \(3\)](#)

Features

Product Type Features

Wire/Cladding Type	Metal Pin
Model Number	TS305-11C55
Thermopile Infrared Sensor Type	Thermopile Temperature Element
Filter Type	Long Wave Pass 5.5µm

Electrical Characteristics

TP Voltage (T_BB/T_amb)	7 ± 2.1 mV
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Dimensions

Thermopile Infrared Sensor Wire Length	13.5 mm[.53 in]
Thermopile Infrared Sensor Diameter	9.1 mm[.36 in]
Thermopile Infrared Sensor Length	4.4 mm[.173 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	NTC



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-5
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Other

Field of View at FWHM	88 °
Optics	Flat Window
β-Value (at T1/T2) NTC	3955 ± .3 %

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	Out of Scope
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: JUNE 2023 (235) Candidate List Declared Against: JAN 2021 (211) Does not contain REACH SVHC
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-on-reach>

Compatible Parts




TE Part # CAT-IR0001
IR Sensors: Analog

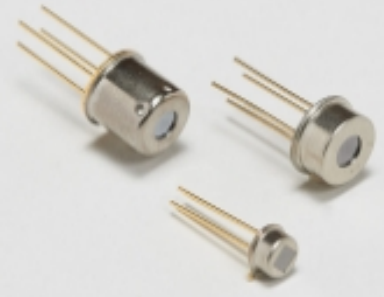


TE Part # G-TPCO-035
TS418-1N426

Also in the Series | MEAS TS



Sensor Development Boards and Evaluation Kits(2)



Thermopile Infrared Sensors(8)

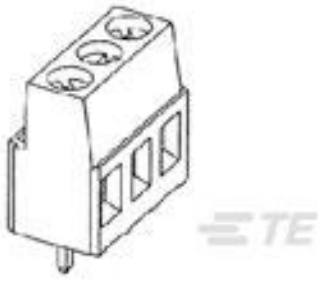
Customers Also Bought



TE Part #1658608-1
37 POS HDF PLUG, MS, LEAD FREE



TE Part #1658610-1
37 POS HDF RCPT, MS, LEAD FREE



TE Part #282841-4
TERMI-BLOK PCB MOUNT 4P. 5



TE Part #MS583702BA01-50
MS5837-02BA01 2BA T&R PRESSURE SEN



TE Part #20015885-02
FS2030-000X-1500-G



TE Part #2600031-1
4CCT BLACK PLUG W/SMALL SEAL



TE Part #2-6447164-4
FSN-12A-4

Documents

[CAD Files](#)

[3D PDF](#)

[3D](#)

[Customer View Model](#)



[ENG_CVM_CVM_G-TPCO-033_A.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_G-TPCO-033_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_G-TPCO-033_A.3d_stp.zip](#)

English

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Datasheets & Catalog Pages

[Datasheet Analog Infrared Thermopiles](#)

English

[TS305-11C55](#)

English