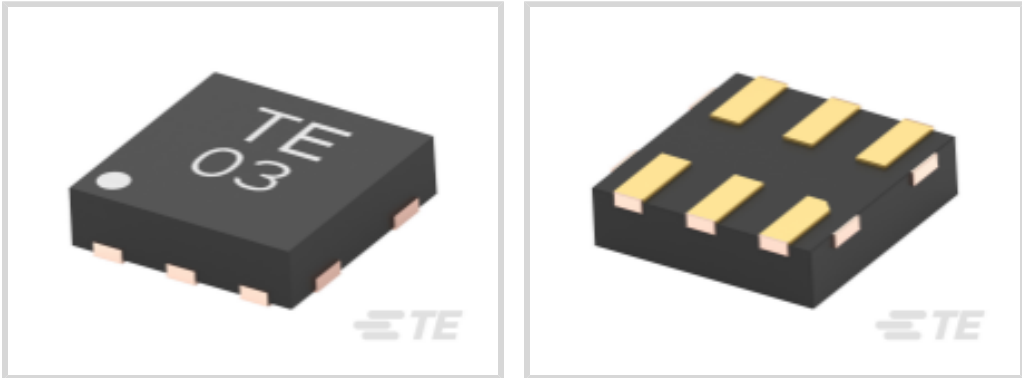




Sensors > Temperature Sensors > Digital Temperature Sensors > TSYS03 DIGITAL TEMPERATURE SENSOR



Sensor Package: XDFN6

Resolution: 16 bit

Accuracy (at T_ref): ± .5 °C

Output Interface: I2C

Supply Voltage: 2.4 - 5.5 V

[All TSYS03 DIGITAL TEMPERATURE SENSOR \(2\)](#)

Features

Product Type Features

Sensor Package	XDFN6
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Configuration Features

Electrical Connection	SMD
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Electrical Characteristics

Supply Voltage	2.4 - 5.5 V
Supply Current (Max)	400 µA

Dimensions

Product Length	1.5 mm[.059 in]
Product Width	1.5 mm[.059 in]
Product Height	.38 mm[.015 in]

Usage Conditions

Accuracy T_Range	-5 - 50 °C
Operating Temperature Range	-40 - 125 °C[-40 - 257 °F]
Accuracy (at T_ref)	± .5 °C

Operation/Application

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Output Interface	I2C
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Other

Resolution	16 bit
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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: JAN 2024 (240) Candidate List Declared Against: JAN 2024 (240) Does not contain REACH SVHC
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
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 Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles'(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

Compatible Parts

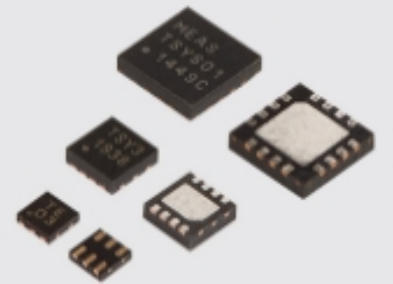




TE Part # 20011957-00
TSYS03 TEMP SENSOR TDFN8 2.5X2.5MM I2C

Also in the Series

MEAS TSYS



Digital Temperature Sensors(4)

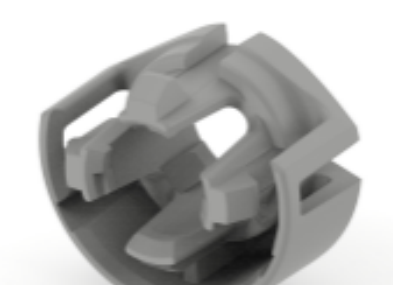


Sensor Development Boards and Evaluation Kits(4)

Customers Also Bought



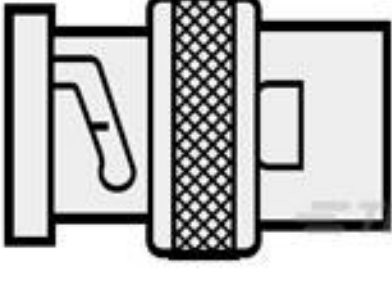
TE Part # 2371243-1
CU ALLOY, OUTER FERRULE, ICT CVE



TE Part # 2371245-2
SOC CONN CVR, 3POS, DIA 4MM, ICT CVE



TE Part # 2371245-3
SOC CONN CVR, 3POS, DIA 4MM, ICT CVE



TE Part # 918455-000
RBD-75-S-00



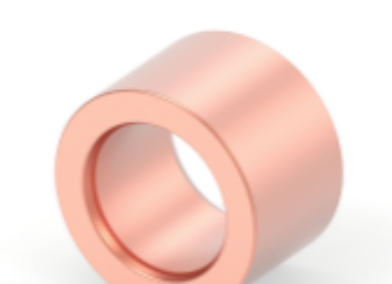
TE Part # 1924968-4
Contact, male 0.64, 18 AWG



TE Part # 2103191-4
CAP SUBASSY, KEY D, HVA280-2PHI



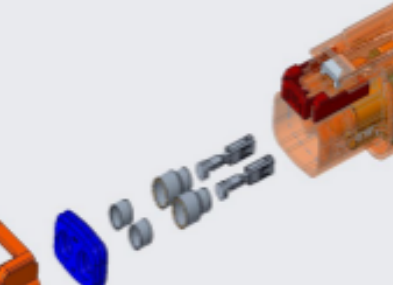
TE Part # 2371242-2
CU ALLOY, INNER FERRULE, ICT CVE



TE Part # 2371242-3
CU ALLOY, INNER FERRULE, ICT CVE



TE Part # BTH1-19-12-1-B
BTH1-19-12-1-B



TE Part # YHVA280-2PHI-4MM-A
HVA280-2PHI XE, 4SQMM, KEY A



Documents

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_20011957-01_1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_20011957-01_1.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_20011957-01_1.3d_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

Datasheet TSYS03

English