Vishay Intertechnology High Precision Thin Film Wraparound Chip Resistor Delivers Tight TCR of ± 2 ppm/°C Over 100 Ω to 3.05 MΩ Resistance Range

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Device Features Operating Temp. Range From -55 °C to +155 °C and Power to 1 W in Five Case Sizes From 0402 to 2010

MALVERN, Pa., May 17, 2021 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new high precision thin film wraparound chip resistor for industrial, medical, military, and aerospace applications. The Vishay Sfernice P2TC offers a tight TCR of ± 2 ppm/°C over wider resistance and temperature ranges — and in more case sizes with higher power ratings — than competing devices.

Available in five case sizes from 0402 to 2010, the device released today offers a wide resistance range of 100 Ω to 3.05 MΩ, with tolerances down to ± 0.01 %; operates over a broad temperature range of -55 °C to +155 °C; and offers a high power rating to 1 W. Combined with very low noise of <-35 dB, a low voltage coefficient of < 0.01 ppm/V, and load-life stability of ± 0.05 % typical for 2,000 hours at +70 °C, the resistor's specifications exceed the requirements of MIL-PRF-55342G.

The P2TC is optimized for precision applications requiring low noise and high stability over time and temperature. End products will include instrumentation, military and avionics guidance systems, load cell electronics in weighing systems, and operational amplifiers for test and measurement equipment.

RoHS-compliant, halogen-free, and Vishay Green, the device is sulfur-resistant per the ASTM B809-95 humid vapor test.

Device Specification Table:

Case size	Resistance range (Ω)	Rated power (W) Pn[1]	Rated Power (W) Pd[2]	Limiting element voltage (V)
0402	100 to 35 k	0.063	0.040	50
0603	100 to 128 k	0.125	0.100	75
0805	100 to 291 k	0.200	0.125	150
1206	150 to 1.09 M	0.330	0.250	200
2010	200 to 3.05 M	1	0.500	300

[1] Pn = nominal power
[2] Pd = derated power intended to improve stability

Samples and production quantities of the P2TC resistor are available now, with lead times of 16 weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.** ™ Vishay Intertechnology, Inc. is a Fortune 1,000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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Link to product datasheet:
http://www.vishay.com/ppg?53080 (P2TC)

Link to product photo:
https://www.flickr.com/photos/vishay/albums/72157719142020734

For more information please contact:
Vishay Intertechnology
Peter Henrici, +1 408 567-8400
peter.henrici@vishay.com
or
Redpines
Bob Decker, +1 415 409-0233
bob.decker@redpinesgroup.com



Source: Vishay Intertechnology, Inc.