



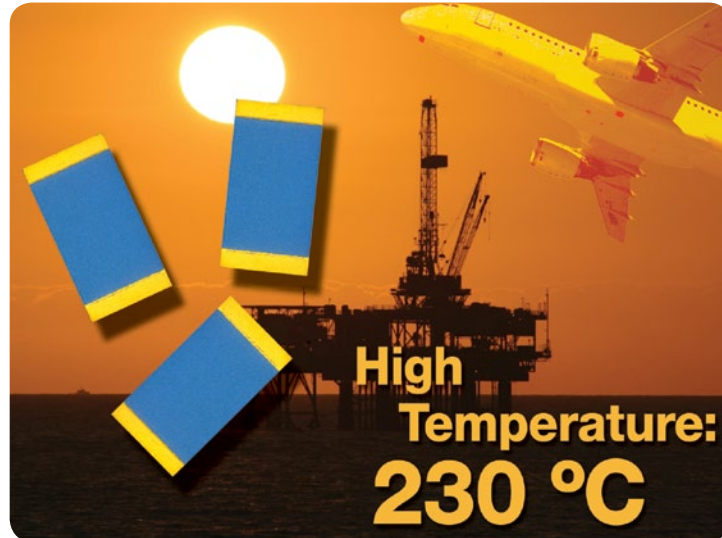
THIN FILM CHIP RESISTOR

PHT



Resistors - High Temperature (230 °C) Thin Film Chip

High-Temperature (230 °C), High-Precision Wraparound Thin Film Chip Resistors



KEY BENEFITS

- Operating temperature range of - 55 °C to + 215 °C
- Storage temperature range of - 55 °C to + 230 °C
- Temperature coefficient down to 25 ppm (- 55 °C to + 215 °C)
- Tolerance down to 0.05 %
- Wide ohmic range (10R – 7M Ω)
- Load life stability of 0.5 % after 1000 h at P_n at 215 °C

APPLICATIONS

- Down hole drilling instruments

RESOURCES

- Datasheet: PHT - <http://www.vishay.com/doc?53050>
- For technical questions contact sfer@vishay.com

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components

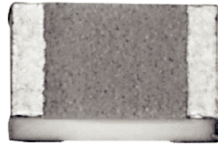


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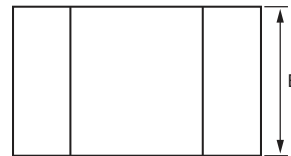
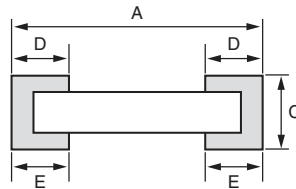
INTRODUCTION

For applications such as down hole applications, the need for parts able to withstand very severe conditions (temperature as high as 215 °C powered or up to 230 °C un-powered) has led Vishay Sfernice to push out the limit of the thin film technology.

Designers might read the application note: Power Dissipation Considerations in High Precision Vishay Sfernice Thin Film Chip Resistors and Arrays (P, PRA etc...) (High Temperature Application) www.vishay.com/doc?53047 in conjunction with this datasheet to help them to properly design their PCBs and get the best performances of the PHT.

Vishay Sfernice R&D engineers will be willing to support any customer design considerations.

DIMENSIONS in millimeters (inches)



FEATURES

- Operating temperature range: - 55 °C; + 215 °C
- Storage temperature: - 55 °C; + 230 °C
- Gold terminations (< 1 µm thick)
- 5 sizes available (0402, 0603, 0805, 1206, 2010); other sizes upon request
- Temperature coefficient down to 15 ppm (- 55 °C; + 215 °C)
- Tolerance down to 0.05 %
- Load life stability: 0.5 % max after 1000 h at 215 °C (ambient) at Pn
- SMD wraparound
- 0.02 % upon request
- TCR remains constant after long term storage at 230 °C (15 000 h)
- Compliant to RoHS Directive 2002/95/EC



RoHS COMPLIANT

GREEN [5-2008]**

Note

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

CASE SIZE	A		B		C	D/E	
	MAX. TOL. + 0.152 (+ 0.006) MIN. TOL. - 0.152 (- 0.006)		MAX. TOL. + 0.127 (+ 0.005) MIN. TOL. - 0.127 (- 0.005)			NOMINAL	NOMINAL
	NOMINAL		NOMINAL				
0402	1.00 (0.039)		0.60 (0.024)		0.5 (0.02) ± 0.127 (0.005)	0.25 (0.010)	0.1 (0.004)
0603	1.52 (0.060)		0.85 (0.033)			0.38 (0.015)	0.13 (0.005)
0805	1.91 (0.075)		1.27 (0.050)			0.40 (0.016)	
1206	3.06 (0.120)		1.60 (0.063)			0.48 (0.019)	
2010	5.08 (0.200)		2.54 (0.100)				

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