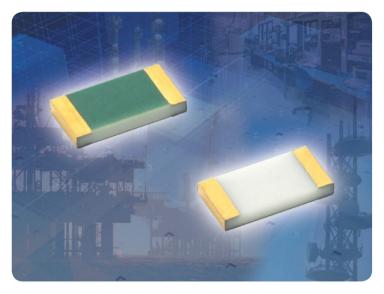




Precision Low TCR, High Temperature up to 215 °C, Thin Film Resistor, Surface-Mount Chip



KEY BENEFITS

- Wide operating temperature range up to 215 °C
- Absolute TCR of ± 5 ppm/°C
- Tolerances to ± 0.02 %
- 250 Ω to 3 M Ω resistance range
- Noise of < 35 dB
- Voltage coefficients of 0.1 ppm/V
- 75 V to 200 V voltage range

APPLICATIONS

- High-temperature down hole applications
- High-precision oil/gas exploration
- Telecommunications
- Industrial applications

RESOURCES

- Datasheet: PLTT http://www.vishay.com/doc?60082
- For technical questions contact <u>thinfilm@vishay.com</u>

Discrete Semiconductors and Passive Components

One of the World's Largest Manufacturers of

VMN-PT0256-1201

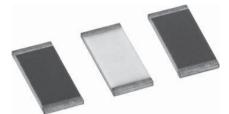


PRODUCT SHEET



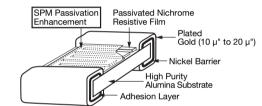


Precision Low TCR, High Temperature up to 215 °C, Thin Film Resistor, Surface-Mount Chip



Vishay's proven precision thin film wraparound resistors will meet your exact requirements. These resistors are ideal for use in oil industry precision applications requiring low noise, long term stability under high temperature, ultra low temperature coefficient of resistance, and low voltage coefficient. The chip resistors are available in any resistance ohmic value in the range specified below.

CONSTRUCTION



FEATURES

- 55 °C to 215 °C operating temperature range
- TCR of ± 5 ppm/°C standard
- Tolerances to ± 0.02 %
- Anti corrosion resistant film with (SPM) special RoHS COMPLIANT passivation method HALOGEN FREE
- Stable film and performance characteristics
- 0.5 % max. at 2000 h, 215 °C, 25 % rated power
- Non-standard resistance values available
- · Very low noise and voltage coefficient (< - 30 dB, 0.1 ppm/V)
- UL 94 V-0 flame resistant
- Gold terminations (10 μ" to 20 μ")
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

TYPICAL PERFORMANCE

	ABSOLUTE	
TCR	5	
TOL.	0.02	

STANDARD ELECTRICAL SPECIFICATIONS				
TEST	SPECIFICATIONS	CONDITIONS		
Material	Passivated nichrome	-		
Resistance Range	250 Ω to 3 M Ω	-		
TCR: Absolute	± 5 ppm/°C	- 55 °C to + 125 °C		
Tolerance: Absolute	\pm 0.1 % to \pm 0.02 %	+ 25 °C		
Stability: Absolute	$\Delta R \pm 0.5 \%$	2000 h at 215 °C, 25 % rated power		
Stability: Ratio	-	-		
Voltage Coefficient	± 0.1 ppm/V (typical)	-		
Working Voltage	100 V to 200 V	-		
Operating Temperature Range	- 55 °C to + 215 °C	-		
Storage Temperature Range	- 55 °C to + 215 °C	-		
Noise	< - 35 dB (typical)	-		
Shelf Life Stability: Absolute	$\Delta R \pm 0.01 \%$	1 year at + 25 °C		

COMPONENT RATINGS				
CASE SIZE	POWER RATING (mW)	WORKING VOLTAGE (V)	RESISTANCE RANGE (Ω)	
0805	250 at 70 °C	100	250 to 260K	
1206	400 at 70 °C	200	500 to 775K	
2010	800 at 70 °C	200	500 to 2M	
2512	1000 at 70 °C	200	500 to 3M	

Note

Consult factory for additional case size

* Pb containing terminations are not RoHS compliant, exemptions may apply

PRODUCT SHEET



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esistors - High Temperature (215 °C) Thin Film Chi

