CHIP RESISTORS, RESISTOR NETWORKS

RMKHT (CNHT)

Resistors - High Temperature (215 °C) Chip

High-Temperature (215 °C) Wirebondable Chip Resistors and Resistor Networks

ES COMPONENTS
108 PRATTS JUNCTION
ROAD STERLING, MA 01564
PHONE: (978) 422-7641
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KEY BENEFITS

- Operating temperature range (- 55 °C to + 215 °C)
- Storage temperature (- 55 °C to + 230 °C)
- Temperature coefficient down to 25 ppm (- 55 °C to + 215 °C)
- Tolerance down to 0.05 %
- Wirebondable (aluminum pads)
- Custom network available (CNHT)
- Metalized backside option
- Wide ohmic range (10R to 6M)
- Load life stability: 0.5 % after 1000 h at P_n at 215 °C

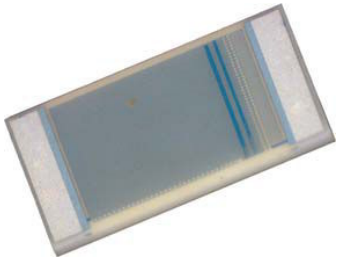
APPLICATIONS

- Down-hole drilling instruments
- Aircraft braking systems

RESOURCES

- Datasheet: RMKHT (CNHT) - http://www.vishay.com/doc?60075
- For technical questions contact sfer@vishay.com

High-Temperature (215 ºC) Wirebondable Chip Resistors and Resistor Networks



FEATURES

- Operating temperature range: - 55 °C; + 215 °C
- Storage temperature: - 55 °C; + 230 °C
- Wirebondable (aluminum pads)
- Large selection of sizes available
- Custom networks available on request (CNHT)
- Temperature coefficient down to 15 ppm/°C (- 55 °C; + 215 °C)
- Tolerance down to 0.05 %
- Temperature coefficient remains at 15 ppm/°C after long term storage at 230 °C
- Compliant to RoHS Directive 2002/95/EC

Pb-free

RoHS COMPLIANT

GREEN (5-2008)**

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 leaded 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 RMKHT.

Vishay Sfernice research and development engineers will be willing to support any customer design considerations.

TYPICAL PERFORMANCE

	ABS	TRACKING (1)
TCR	25 ppm/°C	2 ppm/°C
	ABS	RATIO (1)
TOL.	0.05 %	0.02 %

Note

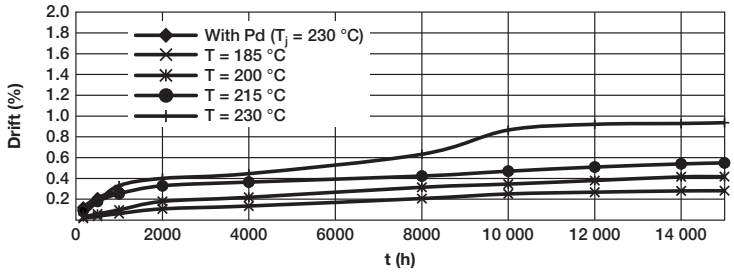
(1) When applicable (networks only)

MECHANICAL SPECIFICATIONS	
Resistive element	Nichrome (NiCr)
Substrate material	Silicon (size 22, 33, 55, 515) - alumina (other sizes)
Bonding pads	Aluminum (Al)
Passivation	Silicon nitride (Si_3N_4)
Back metallization (2)	Gold on nickel barrier

Revision 12-Jul-11

Note

(2) When applicable (only on alumina substrate)



Note

- TCR (- 55 °C; + 215 °C) remains unchanged after 15 000 hours storage

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