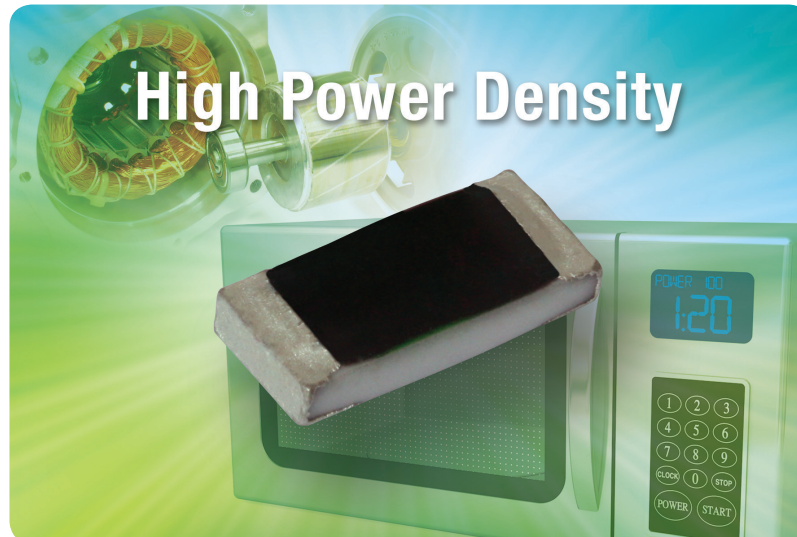




THICK FILM CHIP RESISTORS

RCWH0805

Thick Film Surface-Mount Chip Resistors, Wraparound, Extremely Low Value (0.01 Ω to 0.976 Ω)



KEY BENEFITS

- The higher power density requires less circuit board space and fewer components to be used in the design; fewer parts reduces cost by minimizing the size of the circuit board and lowering placement costs
- Allows a designer to extend the capability of an existing design without using a larger footprint current sense resistor that requires more board space

APPLICATIONS

Telecommunications:

- Power management in cell phones, DC/DC converters

Computer:

- Power management / safety, DC/DC converter, VRMs

Consumer:

- Air conditioning / heat pump (inverter control), white goods (inverter control)

Industrial:

- Air conditioning / refrigeration (inverter control)
- Oil / gas well drilling (down hole test and measurement equipment)

RESOURCES

- Datasheet: RCWH0805 - www.vishay.com/doc?31110
- For technical questions contact ww2bresistors@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

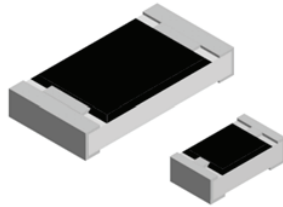


A WORLD OF
SOLUTIONS

THICK FILM CHIP RESISTORS

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FEATURES

- Extremely low resistance values (0.01 Ω to 0.976 Ω)
- Suitable for current sensing and shunts
- Metal glaze on high quality ceramic
- Protective overglaze
- Lead (Pb)-free solder contacts on Ni barrier layer

STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	CASE SIZE	POWER RATING $P_{70^{\circ}\text{C}}$ W	TEMPERATURE COEFFICIENT \pm ppm/ $^{\circ}\text{C}$	RESISTANCE RANGE Ω	TOLERANCE \pm %	E-SERIES ⁽²⁾
RCWH0805	0805	0.33	400	0.010 to 0.018	5.0	24
			300	0.02 to 0.03	1.0, 5.0	24; 96
			200	0.033 to 0.05	1.0, 5.0	
			100	0.051 to 0.976	0.5, 1.0, 5.0 ⁽¹⁾	

Notes

- Power rating depends on the max. temperature at the solder point, the component placement density and the substrate material.
- Part marking: reference "Surface Mount Resistor Marking" (www.vishay.com/doc?220020).
- ⁽¹⁾ Tight tolerance of 0.5 % is available for resistance values above 0.200 Ω.
- ⁽²⁾ Use E24 decade values for 5.0 % tolerance parts and E96 decade values for 0.5 % and 1.0 %. Refer to "Standard Decade" table (www.vishay.com/doc?31001).

GLOBAL PART NUMBER INFORMATION															
Global Part Numbering example: RCWH0805R499FKEA (visit www.vishay.net Vishay Dale parts numbering manual for all options)															
R	C	W	H	0	8	0	5	R	4	9	9	F	K	E	A
GLOBAL MODEL (8 digits)				VALUE (4 digits)				TOLERANCE (1 digit)		TCR (1 digit)			PACKAGING (2 digits)		
RCWH0805				L = mΩ * R = decimal 10L0 = 0.01 Ω R470 = 0.47 Ω Note: * Use "L" for resistance values < 0.1 Ω				D = \pm 0.5 % F = \pm 1.0 % G = \pm 2.0 % J = \pm 5.0 %		K = \pm 100 ppm/ $^{\circ}\text{C}$ N = \pm 200 ppm/ $^{\circ}\text{C}$ M = \pm 300 ppm/ $^{\circ}\text{C}$ Q = \pm 400 ppm/ $^{\circ}\text{C}$ P = \pm 500 ppm/ $^{\circ}\text{C}$ T = \pm 600 ppm/ $^{\circ}\text{C}$ G = \pm 700 ppm/ $^{\circ}\text{C}$			EA = lead (Pb)-free, tape / reel		

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RCWH0805
Operating temperature range	$^{\circ}\text{C}$	-55 to +155
Maximum operating voltage	V	$(P \times R)^{1/2}$
Insulation voltage U_{ins} (1 min)	V	> 200
Insulation resistance	Ω	> 10^9
Weight/1000 pieces (typical)	g	5.5

Revision 21-Jul-16