Vishay Dale



# Wirewound Resistors, Commercial Power, Printed Circuit Board, Tab Type Terminals



## FEATURES

- Variety of core lengths
- Terminals designed for direct mounting into a circuit board to be securely clamped
- Available potted in a ceramic case to increase power dissipation, contact factory by using the e-mail address at the bottom of this page

STANDARD ELECTRICAL SPECIFICATIONS				
MODEL*	POWER RATING	RESISTANCE RANGE	WEIGHT	
	P₂₅°c	Ω	(Typical)	
	W	$\pm$ 10% Standard, $\pm$ 5% Available	g	
PCT-4050	2.0	0.10 - 390	0.57	
PCT-4065	2.6	0.14 - 560	0.59	
PCT-4085	3.4	0.20 - 785	0.62	
PCT-4105	4.2	0.25 - 1.01k	0.65	
PCT-4145	5.8	0.36 - 1.46k	0.71	
PCT-4185	7.4	0.47 - 1.91k	0.77	
PCT-4215	8.6	0.56 - 2.25k	0.81	

\*PCT-4000 model numbers are calculated from the power rating of 4 watts per inch. The last three digits of the model number represent the mounting center spacing of the resistors in inches (decimal is between the first and second digit, mounting center spacing is available between 0.50 [12.70mm] and 2.15 [54.61mm]. **Example: PCT-4150 = 1.50 inches x 4 watts per inch = 6 watts.** 

TECHNICAL SPECIFICATIONS				
PARAMETER	UNIT	PCT-4000 RESISTOR CHARACTERISTICS		
Power Rating	W	4 per inch		
Temperature Coefficient	ppm/°C	$\pm$ 600 below 1.0 $\Omega,\pm$ 300 1.0 $\Omega$ and above		
Short Time Overload	-	5 x rated power for 5 seconds		
Maximum Working Voltage	V	(P x R) <sup>1/2</sup>		
Operating Temperature Range	٥C	- 65/+ 375		
Terminal Strength	lb	10 minimum		

#### **ORDERING INFORMATION**

PCT-4150 MODEL  $300\Omega$ RESISTANCE  $\Omega$  10% TOLERANCE ± %

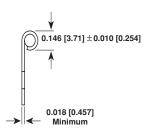
Example: A 1.50 inch mounting center spacing (at 4 watts per inch), 300 ohm,  $\pm$  10% unit is designated as shown. Total wattage of unit is 6 watts (4 watts per inch x 1.50 inch).

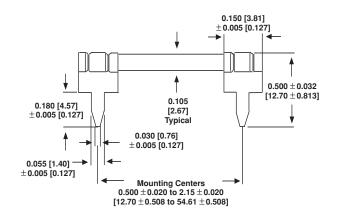


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#### **DIMENSIONS** in inches [millimeters]

#### PCT-4000





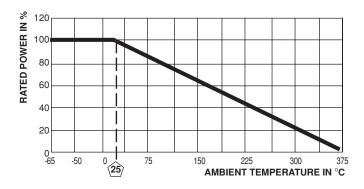
### **MATERIAL SPECIFICATIONS**

**Element:** Nickel-chrome alloy or copper-nickel alloy, depending on resistance value

Core: Woven fiberglass

Terminals: Electro tin plated steel

Part Marking: None



PERFORMANCE				
TEST	CONDITIONS OF TEST	TEST LIMITS (EIA RS-344)		
Thermal Shock	-55°C to + 275°C, 5 cycles, 30 minute dwell time	± (5.0% + 0.05Ω)ΔR		
Short Time Overload	5 x rated power for 5 seconds	± (4.0% + 0.05Ω)ΔR		
Low Temperature Operation	- 65°C, full rated working voltage for 45 minutes	± (3.0% + 0.05Ω)ΔR		
Humidity	75°C, 90% - 100% RH, 240 hours	± (5.0% + 0.05Ω)ΔR		
Load Life	1000 hours at rated power, + 25°C, 1.5 hours "ON", 0.5 hours "OFF"	± (10.0% + 0.05Ω)ΔR		
Resistance to Solder Heat	Terminal immersed 3.5 seconds in molten solder at 1/8" to 3/16" from body	± (4.0% + 0.05Ω)ΔR		