



## Wirewound Resistors, Commercial High Power, Quick Connect Terminals



### FEATURES

- Can be purchased with or without brackets installed (“BKT” SPECIAL)
- Solder tag terminals are standard, quick connect terminals available
- High power ratings
- Special inorganic potting compound and ceramic case provide high thermal conductivity in a fireproof package
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

STANDARD ELECTRICAL SPECIFICATIONS				
GLOBAL MODEL	POWER RATING $P_{40^{\circ}\text{C}}$ W	RESISTANCE RANGE $\Omega$	TOLERANCE $\pm \%$	WEIGHT (typical) g
PC-30	30	1 to 2K	5, 10	45
PC-40	40	1 to 2K	5, 10	75
PC-50	50	1 to 2K	5, 10	75

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	PC QUICK CONNECT CHARACTERISTICS
Temperature Coefficient	ppm/°C	$\pm 300$
Short Time Overload	-	10 x rated power for 5 s
Operating Temperature Range	°C	-55 to +275
Dielectric Withstanding Voltage	$V_{AC}$	1000
Maximum Continuous Working Voltage	V	$(P \times R)^{1/2}$

### GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: **PC-3022R00KE66** (Visit [www.vishay.net](http://www.vishay.net) SAP Parts Manual for all options)

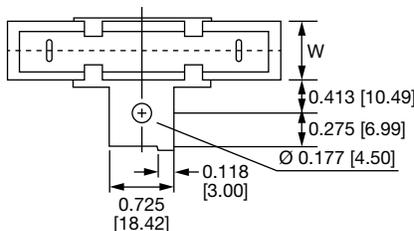
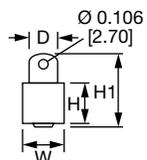
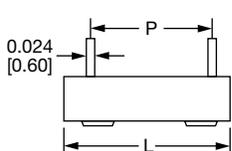
<b>P</b>	<b>C</b>	<b>-</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>R</b>	<b>0</b>	<b>0</b>	<b>K</b>	<b>E</b>	<b>6</b>	<b>6</b>			
GLOBAL MODEL (5 digits)			VALUE (5 digits)			TOLERANCE (1 digit)		PACKAGING CODE (3 digits)			SPECIAL (up to 3 digits)					
PC-30 PC-40 PC-50			R = decimal K = thousand 15R00 = 15 $\Omega$ 1K500 = 1.5 k $\Omega$			J = $\pm 5 \%$ K = $\pm 10 \%$		E66 = lead (Pb) free bulk pack			(dash number) from 1 to 999 as applicable BKT = solder tags, bracket QC = quick connect, no bracket BQC = quick connect, bracket					

Historical Part Number example: **PC-30-22-10 %**

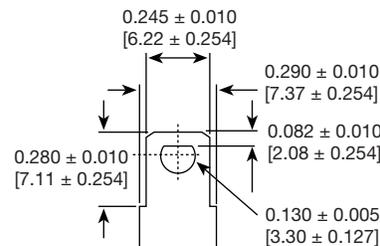
PC-30	22 $\Omega$	10 %
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE



**DIMENSIONS** in inches [millimeters]



Quick connect terminal connections 0.250 [6.35]



0.032 [0.813] thick

Solder tag terminal dimensions shown (standard part and -BKT option).

Quick connect terminal dimensions for -QC and -BQC options.

GLOBAL MODEL	DIMENSIONS in inches [millimeters]					
	W ± 0.050 [1.27]	H ± 0.050 [1.27]	L ± 0.079 [2.00]	H <sub>1</sub> ± 0.125 [3.18]	P ± 0.079 [2.00]	D ± 0.02 [0.50]
PC-30	0.75 [19.00]	0.75 [19.00]	2.95 [75.00]	1.14 [28.96]	2.17 [55.00]	0.30 [7.50]
PC-40	0.75 [19.00]	0.75 [19.00]	3.54 [90.00]	1.14 [28.96]	2.64 [67.00]	0.30 [7.50]
PC-50	0.75 [19.00]	0.75 [19.00]	3.54 [90.00]	1.14 [28.96]	2.64 [67.00]	0.30 [7.50]

**MATERIAL SPECIFICATIONS**

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

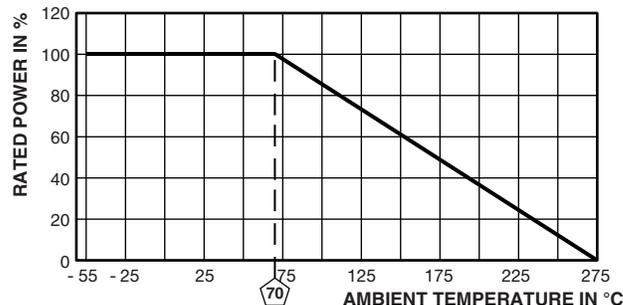
**Core:** high purity grade alumina ceramic rod

**Body:** steatite ceramic case with inorganic potting compound

**Terminals:** 100 % tin

**Part Marking:** HEI, model, wattage, value, tolerance, date code

**DERATING**



PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Short Time Overload	10 x rated power for 5 s	± 2 % ΔR
Load Life	1000 h at rated power, +70 °C, 1.5 h "ON", 0.5 h "OFF"	± 5 % ΔR
Temperature Cycle	-30 °C; ~85 °C for 5 cycles	± 1 % ΔR



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