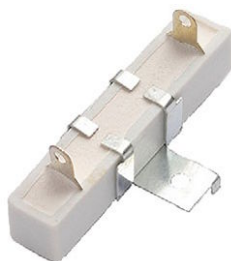




Wirewound Resistors, Commercial High Power, Quick Connect Terminals



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



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

| STANDARD ELECTRICAL SPECIFICATIONS | | | | |
|------------------------------------|---|------------------------------|-----------------------|--------------------------|
| GLOBAL MODEL | POWER RATING $P_{40^{\circ}\text{C}}$ W | RESISTANCE RANGE Ω | 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 | ± 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 SAP Parts Manual for all options)

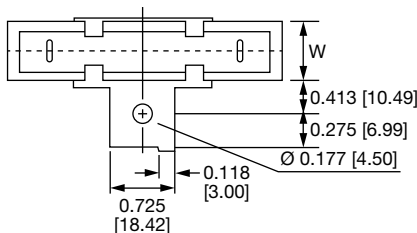
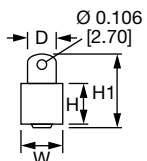
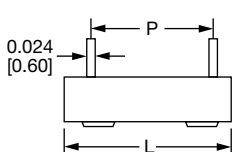
| | | | | | | | | | | | | | | | | |
|----------------------------|---|---|--|---|---|-----------------------------------|--------------------------------|---|---|---|---|---|---|--|--|--|
| P | C | - | 3 | 0 | 2 | 2 | R | 0 | 0 | K | E | 6 | 6 | | | |
| GLOBAL MODEL (5 digits) | | | VALUE (5 digits) | | | TOLERANCE (1 digit) | PACKAGING CODE (3 digits) | | | SPECIAL (up to 3 digits) | | | | | | |
| PC-30 PC-40 PC-50 | | | R = decimal K = thousand 15R00 = 15 Ω 1K500 = 1.5 k Ω | | | 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 %**

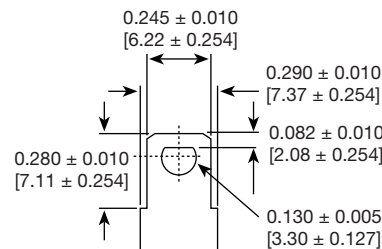
| | | |
|------------------|------------------|-----------|
| PC-30 | 22 Ω | 10 % |
| HISTORICAL MODEL | RESISTANCE VALUE | TOLERANCE |



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 ₁ ± 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

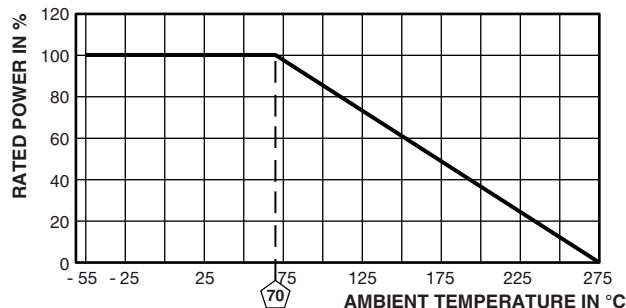
Core: high purity grade alumina ceramic rod

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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