

Wirewound Resistor, Industrial Power, Vitreous Coated, Miniature Flat


FEATURES

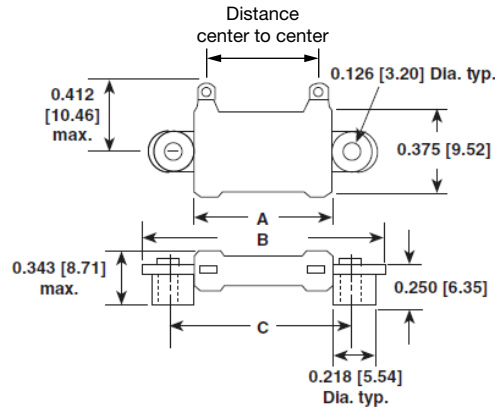
- High temperature vitreous coating
- Mounting accommodations ideally suited to high density packaging
- Available in non-inductive style (special "NI") with Ayrton-Perry winding
- Self-stacking hardware for horizontal or vertical placement
- Mounting hardware functions as a heat sink allowing greater heat dissipation and less derating of stacked units
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

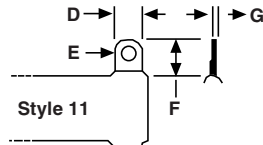
| STANDARD ELECTRICAL SPECIFICATIONS | | | | | |
|------------------------------------|----------------------|---|---|--|-----------------------|
| GLOBAL MODEL | HISTORICAL MODEL | POWER RATING $P_{25\text{ }^\circ\text{C}}$ W | RESISTANCE RANGE Ω $\pm 5\%$ | RESISTANCE RANGE Ω $\pm 10\%$ | WEIGHT (typical) g |
| FVOT10 FVOT10-NI | FVOT-10 FVOT10-NI | 10 | 1.0 to 15K 1.0 to 1.8K | 0.10 to 15K 1.0 to 1.8K | 0.41 |
| FVOT15 FVOT15-NI | FVOT-15 FVOT15-NI | 15 | 1.0 to 26K 1.0 to 3.6K | 0.10 to 26K 1.0 to 3.6K | 0.47 |
| FVOT20 FVOT20-NI | FVOT-20 FVOT20-NI | 20 | 1.0 to 71K 1.0 to 9.8K | 0.10 to 71K 1.0 to 9.8K | 0.74 |

| TECHNICAL SPECIFICATIONS | | |
|---------------------------------|----------|---|
| PARAMETER | UNIT | FVOT RESISTOR CHARACTERISTICS |
| Temperature Coefficient | ppm/°C | ± 260 for 20 Ω and above, ± 400 for 1 Ω to 20 Ω , special TC's available |
| Short Time Overload | - | 10 x rated power for 5 s |
| Dielectric Withstanding Voltage | V_{AC} | 1000, from terminal to mounting hardware |
| Maximum Working Voltage | V | $(P \times R)^{1/2}$ |
| Operating Temperature Range | °C | -55 to +350 |

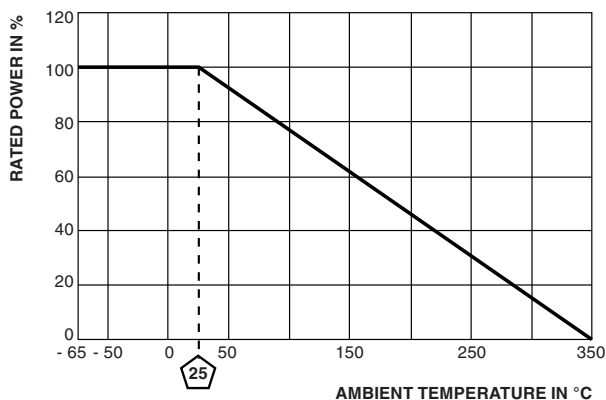
| GLOBAL PART NUMBER INFORMATION | | | | | | |
|--|------------------------------------|------------------------------|---|---------------------------------|---------------------------------------|---|
| Global Part Numbering example: FVOT2011E25R00JE (visit www.vishay.com SAP parts manual for all options) | | | | | | |
| F | V | O | T | 2 | 0 | 1 1 E 2 5 R 0 0 J E |
| GLOBAL MODEL (6 digits) | TERMINAL DESIGNATION (2 digits) | TERMINAL FINISH (1 digit) | VALUE (5 digits) | TOLERANCE (1 digit) | PACKAGING CODE (1 digit) | SPECIAL (up to 2 digits) |
| (See Standard Electrical Specifications Global Model column for options) | 11 | E = lead (Pb)-free | R = decimal K = thousand 1R500 = 1.5 Ω 1K500 = 1.5 k Ω | J = $\pm 5\%$ K = $\pm 10\%$ | E = lead (Pb)-free cell and bulk pack | (Dash number) From 1 to 99 as applicable NI = non-inductive |
| Historical Part Number example: FVOT-20-25-5 % | | | | | | |
| FVOT-20 | 25 Ω | 5 % | | | | |
| HISTORICAL MODEL | RESISTANCE VALUE | TOLERANCE | SPECIAL | | | |

DIMENSIONS in inches [millimeters]


| MODEL | DIMENSIONS in inches [millimeters] | | | | |
|--------|------------------------------------|------------------------|------------------------|---|-------------------------------------|
| | A ± 0.063 [1.59] | B ± 0.063 [1.59] | C ± 0.031 [0.79] | DISTANCE CENTER TO CENTER (REF.) | STANDARD TERMINAL DESIGNATION |
| FVOT10 | 0.750 [19.05] | 1.312 [33.32] | 1.000 [25.40] | 0.531 [13.49] | 11 |
| FVOT15 | 1.000 [25.40] | 1.562 [39.67] | 1.250 [31.75] | 0.781 [19.84] | 11 |
| FVOT20 | 2.062 [52.37] | 2.552 [64.83] | 2.312 [58.72] | 1.843 [46.81] | 11 |

TERMINAL DIMENSIONS


| DIMENSIONS | DIMENSIONS in inches [millimeters] |
|----------------------|------------------------------------|
| | STYLE 11 |
| D | 0.125 [3.18] |
| E (HOLE DIAMETER) | 0.081 [2.10] |
| F | 0.235 [5.97] |
| G | 0.020 [0.51] |

DERATING

MATERIAL SPECIFICATIONS

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

Core: ceramic, steatite or cordierite

Coating: special high temperature vitreous

Standard Terminals: tinned alloy 42

Terminal Bands: alloy 42

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

NON-INDUCTIVE

Models of equivalent physical and electrical specifications are available with non-inductive (Ayrton-Perry) winding. They are identified by adding the letters "NI" to the end of the part number in the special section. For non-inductive models the maximum resistance values are lower, see Standard Electrical Specifications table.



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