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

Pb-free

e3

RoHS COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{25\,°C}$ W	RESISTANCE RANGE Ω ± 5 %	RESISTANCE RANGE Ω ± 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 kΩ	**J** = ± 5 % **K** = ± 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

For technical questions, contact: ww2dresistors@vishay.com

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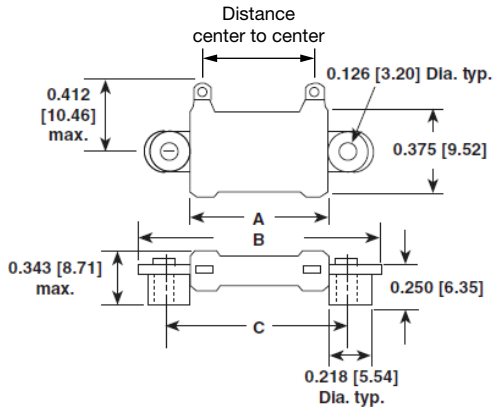
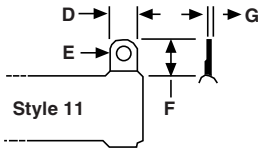
DIMENSIONS in inches [millimeters]



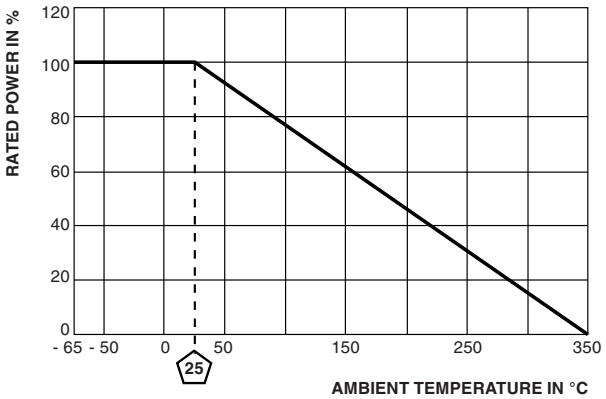
MODEL	DIMENSIONS in inches [millimeters]				
	A ± 0.063 [1.59]	B ± 0.063 [1.59]	C ± 0.031 [0.79]	DISTANCE CENTER TO CENTER (REF.)	STANDARD TERMINAL DESIGNATION
FVOT10	0.750 [19.05]	1.312 [33.32]	1.000 [25.40]	0.531 [13.49]	11
FVOT15	1.000 [25.40]	1.562 [39.67]	1.250 [31.75]	0.781 [19.84]	11
FVOT20	2.062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