Vishay Huntington

# Wirewound Resistor, Industrial Power, Vitreous Coated, Miniature Flat



www.vishay.com

# FEATURES

- High temperature vitreous coating
- Mounting accommodations ideally suited to high density packaging
- Available in non-inductive style (special "NI") with Ayrton-Perry winding



FVOT

- RoHS
- Self-stacking hardware for horizontal or vertical COMPLIANT 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 <u>www.vishay.com/doc?99912</u>

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING P <sub>25 °C</sub> W	RESISTANCE RANGE Ω ±5%	RESISTANCE RANGE Ω ± 10 %	WEIGHT (typical) g
FVOT10	FVOT-10	10	1.0 to 15K	0.10 to 15K	0.41
FVOT10-NI	FVOT10-NI	10	1.0 to 1.8K	1.0 to 1.8K	0.41
FVOT15	FVOT-15	15	1.0 to 26K	0.10 to 26K	0.47
FVOT15-NI	FVOT15-NI		1.0 to 3.6K	1.0 to 3.6K	
FVOT20	FVOT-20	20	1.0 to 71K	0.10 to 71K	0.74
FVOT20-NI	FVOT20-NI	20	1.0 to 9.8K	1.0 to 9.8K	0.74

TECHNICAL SPECIFICATIONS			
PARAMETER	UNIT	FVOT RESISTOR CHARACTERISTICS	
Temperature Coefficient	ppm/°C	$\pm$ 260 for 20 $\Omega$ and above, $\pm$ 400 for 1 $\Omega$ to 20 $\Omega,$ special TC's available	
Short Time Overload	-	10 x rated power for 5 s	
Dielectric Withstanding Voltage	V <sub>AC</sub>	1000, from terminal to mounting hardware	
Maximum Working Voltage	V	(P x R) <sup>1/2</sup>	
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	
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	11	<b>E</b> = lead (Pb)-free	<b>R</b> = decimal <b>K</b> = thousand <b>1R500</b> = 1.5 Ω	<b>J</b> = ± 5 % <b>K</b> = ± 10 %	<b>E</b> = lead (Pb)-free cell and bulk pack	(Dash number) From <b>1</b> to <b>99</b> as applicable
Global Model column for options)			<b>1K500</b> = 1.5 kΩ			<b>NI</b> = non-inductive
Historical Part Number example: FVOT-20-25-5 %						
FVOT-	20	25	Ω	5 %	́о	
HISTORICAL MODEL RESISTANC		CE VALUE	TOLERANCE		SPECIAL	

Revision: 13-Oct-16

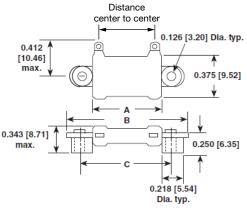
1 For technical questions, contact: <u>ww2dresistors@vishay.com</u> Document Number: 31848

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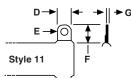
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### **DIMENSIONS** in inches [millimeters]



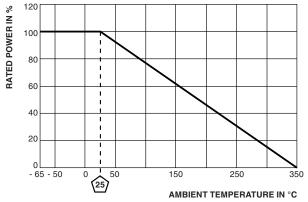
	DIMENSIONS in inches [millimeters]					
MODEL	A ± 0.063 [1.59]	B ± 0.063 [1.59]	C ± 0.031 [0.79]	DISTANCE CENTER TO CENTER (REF.)	STANDARD TERMINAL DESIGNATION	
FVOT10	0.750 [19.05]	1.312 [33.32]	1.000 [25.40]	0.531 [13.49]	11	
FVOT15	1.000 [25.40]	1.562 [39.67]	1.250 [31.75]	0.781 [19.84]	11	
FVOT20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

### TERMINAL DIMENSIONS



DIMENSIONS	DIMENSIONS in inches [millimeters]		
DIVIENSIONS	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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Revision: 01-Jan-2025

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