

# Wirewound Resistors, Industrial Power, Silicone Coated, Printed Circuit Board Mount



### **FEATURES**

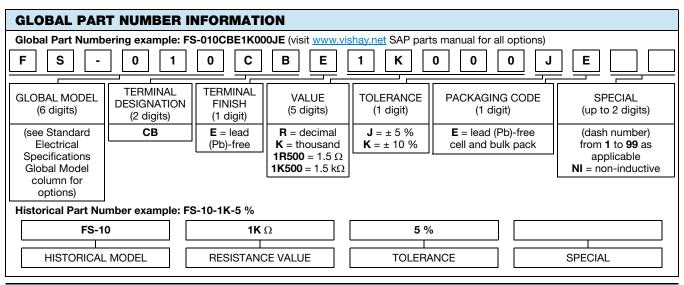
- · High temperature silicone coating
- Eliminates lead forming to keep parts off of PC board



- Built in standoffs provide PC board heat protection and opposing feet to avoid rocking
- Available in non-inductive style (special "NI") with Ayrton-Perry winding
- Material categorization: for definitions of compliance please see <a href="https://www.vishav.com/doc?99912">www.vishav.com/doc?99912</a>

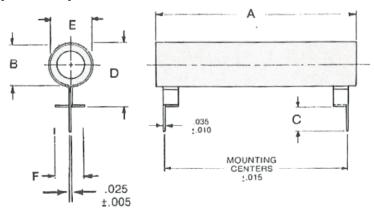
STANDARD ELECTRICAL SPECIFICATIONS									
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING  P <sub>25 °C</sub> W	RESISTANCE RANGE Ω ±5%	RESISTANCE RANGE Ω ± 10 %	WEIGHT (typical) g				
FS-003	FS-3	3	1.0 to 6K	0.1 to 6K	1.16				
FS-05A	FS-5A	5	1.0 to 15K	0.1 to 15K	2.12				
FS-005	FS-5	7	1.0 to 17.5K	0.1 to 17.5K	3.36				
FS-05S	FS-5S	8	1.0 to 20.5K	0.1 to 20.5K	4.60				
FS-010	FS-10	10	1.0 to 29K	0.1 to 29K	6.24				
FS-10S	FS-10S	12	1.0 to 58K	0.1 to 58K	6.60				
FS-020	FS-20	20	1.0 to 60K	0.1 to 60K	8.82				
FS-20S	FS-20S	20	1.0 to 95K	0.1 to 95K	11.36				

TECHNICAL SPECIFICATIONS							
PARAMETER	UNIT	FS RESISTOR CHARACTERISTICS					
Temperature Coefficient	ppm/°C	$\pm$ 260 for 20 $\Omega$ and above, $\pm$ 400 for 1 $\Omega$ to 19.99 $\Omega,$ special TC's available please contact factory					
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	$(P \times R)^{1/2}$					
Operating Temperature Range	°C	-55 to +350					





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



#### Note

• Recommended mounting hole is 0.078 diameter.

	DIMENSIONS in inches [millimeters]								
MODEL	CORE		С				STANDARD MOUNTING		
	A ± 0.062 [± 1.57]	B ± 0.031 [± 0.78]	± 0.062 [± 1.57]	D MAX.	E MAX.	F MAX.	CENTERS ± 0.015 [± 0.381]		
FS-003	1.000	0.200	0.360	0.450	0.281	0.400	0.600		
FS-002	[25.4]	[5.08]	[9.14]	[11.43]	[7.14]	[10.16]	[15.24]		
FS-05A	1.125	0.200	0.360	0.450	0.281	0.400	0.900		
	[28.58]	[5.08]	[9.14]	[11.43]	[7.14]	[10.16]	[22.86]		
FS-005	1.000	0.312	0.360	0.600	0.410	0.500	0.600		
FS-006	[25.4]	[7.94]	[9.14]	[15.24]	[10.41]	[12.7]	[15.24]		
FS-05S	1.125	0.312	0.360	0.600	0.410	0.500	0.900		
	[28.58]	[7.94]	[9.14]	[15.24]	[10.41]	[12.7]	[22.86]		
FS-010	1.750	0.312	0.360	0.600	0.410	0.500	1.300		
	[44.45]	[7.94]	[9.14]	[15.24]	[10.41]	[12.7]	[33.02]		
FS-10S	2.125	0.312	0.360	0.600	0.410	0.500	1.700		
	[53.98]	[7.94]	[9.14]	[15.24]	[10.41]	[12.7]	[43.18]		
FS-015	2.000	0.437	0.19	0.725	0.531	0.531	1.700		
FS-020	[50.8]	[11.11]	[4.82]	[18.41]	[13.49]	[13.49]	[43.18]		
FS-20S	2.375	0.437	0.19	0.725	0.531	0.531	2.200		
	[60.325]	[11.11]	[4.82]	[18.41]	[13.49]	[13.49]	[55.88]		

#### **Notes**

- The pin configuration on the terminals for the FS-10S and smaller products is on the center of the terminal.
- The pin configuration on the terminals for the FS-015 and larger products is on the edge of the terminal

#### **MATERIAL SPECIFICATIONS**

Element: copper-nickel alloy or nickel-chrome alloy,

depending on resistance value

Core: ceramic, steatite

**Coating:** special high temperature silicone **Standard Terminals:** tinned alloy 42

Terminal Bands: alloy 42

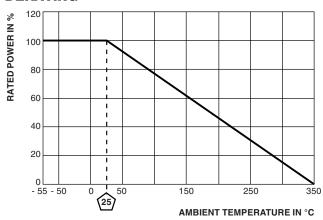
Part Marking: HEI, model, wattage, value, tolerance, date

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 one-half the standard part.

#### **DERATING**





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