Vishay Huntington

Wirewound Resistor, Industrial Power, Silicone Coated, Standard Oval



FEATURES

- High temperature silicone 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 <u>www.vishay.com/doc?99912</u>

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING P _{25 °C} W	RESISTANCE RANGE Ω ±5%	RESISTANCE RANGE Ω ± 10 %	WEIGHT (typical) g
FSOT30 FSOT30-NI	FSOT-30 FSOT-30-NI	30	1.0 to 11K 1.0 to 1.2K	0.10 to 11K 1.0 to 1.2K	20.14
FSOT40 FSOT40-NI	FSOT-40 FSOT-40-NI	40	1.0 to 26K 1.0 to 3K	0.10 to 26K 1.0 to 3K	30.07
FSOT55 FSOT55-NI	FSOT-55 FSOT-55-NI	55	1.0 to 54K 1.0 to 6.8K	0.10 to 54K 1.0 to 6.8K	51.25
FSOT65 FSOT65-NI	FSOT-65 FSOT-65-NI	70	1.0 to 77K 1.0 to 9.4K	0.10 to 77K 1.0 to 9.4K	60.48
FSOT75 FSOT75-NI	FSOT-75 FSOT-75-NI	95	1.0 to 99.9K 1.0 to 12.4K	0.10 to 99.9K 1.0 to 12.4K	76.51

TECHNICAL SPECIFICATIONS				
PARAMETER	UNIT	FSOT RESISTOR CHARACTERISTICS		
Temperature Coefficient ppm/°C ±		\pm 260 for 20 Ω and above, \pm 400 for 1 Ω to 20 $\Omega,$ 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 x R) ^{1/2}		
Operating Temperature Range	°C	- 55 to + 350		

GLOBAL PART NUMBER INFORMATION							
Global Part Numbering example: FSOT5509E25R00JE (visit www.vishay.net SAP parts manual for all options)							
F S O T 5 0 9 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 (1 digit)		SPECIAL (up to 2 digits)
(See Standard Electrical Specifications Global Model column for	09 E = Lead 16 (Pb)-free		R = Decimal K = Thousand 1R500 = 1.5 Ω 1K500 = 1.5 kΩ	J = ± 5 % K = ± 10 %	E = E01 = Lead (Pb)-free skin pack		(Dash number) From 1 to 99 as applicable NI = Non-inductive
options) Historical Part Number example: FSOT-55-25-5 %							
FSOT-20		25 Ω		5 %			
HISTORICAL MODEL		RESISTANCE VALUE		TOLERANCE		SPECIAL	

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For technical questions, contact: <u>ww2dresistors@vishay.com</u>

Document Number: 31847

RoHS

COMPLIANT

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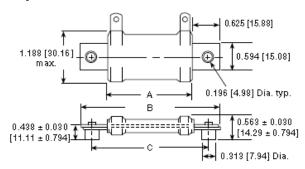
1 For technical questions, contac

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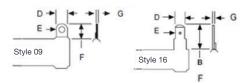


DIMENSIONS in inches [millimeters]



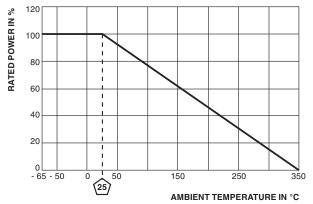
	DIMENSIONS in inches [millimeters]						
MODEL	Α	В	С	DISTANCE BETWEN TERMINALS (REF.)	TERMINAL DESIGNATION		
	± 0.063 [1.59]	± 0.063 [1.59]	± 0.031 [0.79]		STANDARD	OPTIONAL	
FSOT30	1.250 [31.75]	2.500 [63.50]	2.000 [50.8]	0.626 [15.90]	09	16	
FSOT40	2.000 [50.8]	3.125 [79.38]	2.750 [69.85]	1.501 [38.13]	09	16	
FSOT55	3.500 [88.90]	4.375 [111.13]	4.125 [104.78]	3.001 [76.23]	09	16	
FSOT65	4.750 [120.65]	6.000 [152.4]	5.500 [107.98]	4.251 [107.98]	09	16	
FSOT75	6.000 [152.4]	7.125 [180.98]	6.750 [171.45]	5.501 [139.73	09	16	

TERMINAL DIMENSIONS



DIMENSIONS	DIMENSIONS in inches [millimeters]			
DIWIENSIONS	STYLE 09	STYLE 16		
D	0.188 [4.76]	0.188 [4.76]		
E (HOLE DIAMETER)	0.500 [12.70]	0.563 [14.29]		
F	0.104 [2.64]	0.050 [1.27]		
G	0.020 [0.51]	0.020 [0.51]		

DERATING



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

Optional Terminals (Quick Connect): 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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