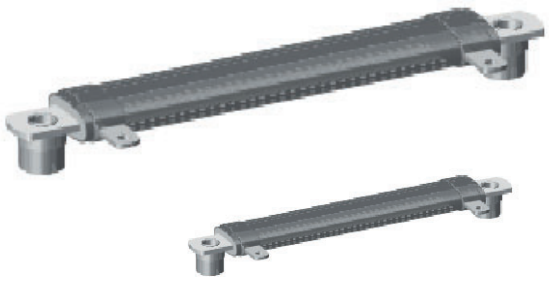
Wirewound Resistor, Industrial Power, Silicone Coated, Standard Oval



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 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
FSOT10 FSOT10-NI	FSOT-10 FSOT-10-NI	10	1.0 to 15K 1.0 to 1.8K	0.10 to 15K 1.0 to 1.8K	0.41
FSOT15 FSOT15-NI	FSOT-15 FSOT-15-NI	15	1.0 to 26K 1.0 to 3.6K	0.10 to 26K 1.0 to 3.6K	0.47
FSOT20 FSOT20-NI	FSOT-20 FSOT-20-NI	20	1.0 to 71K 1.0 to 9.8K	0.10 to 71K 1.0 to 9.8K	0.74
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 / FSOT70 (1) FSOT65-NI / FSOT70-NI (1)	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 / FSOT95 (1) FSOT75-NI / FSOT95-NI (1)	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

Note

(1) The preferred Models are the FSOT70 and FSOT95. FSOT65 and FSOT75 are being shown as they have historically been used for these two wattages.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	FSOT 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: FSOT5509E25R00JE (visit www.vishay.net SAP parts manual for all options)

F	S	O	T	5	5	0	9	E	2	5	R	0	0	J	E		

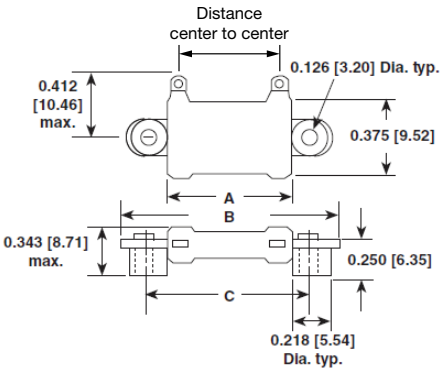
GLOBAL MODEL (6 digits)	TERMINAL DESIGNATION (2 digits)	TERMINAL FINISH (1 digit)	VALUE (5 digits)	TOLERANCE (1 digit)	PACKAGING CODE (1 digit)	SPECIAL (up to 2 digits)
(see Standard Electrical Specifications Global Model column for options)	**09** **11** **16**	**E** = lead (Pb)-free	**R** = decimal **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 **CT** = center tap **NI** = non-inductive

Historical Part Number example: FSOT-55-25-5 %

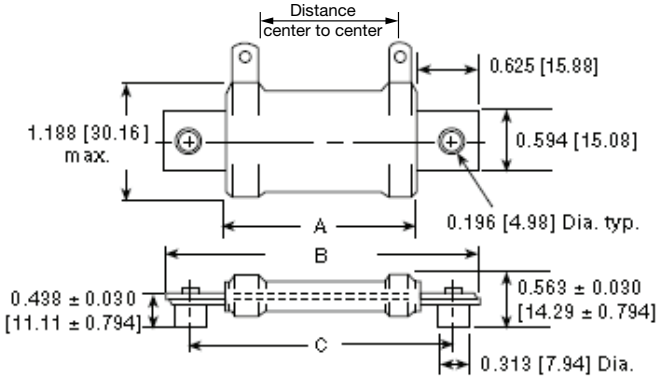
FSOT-20	25 Ω	5 %	
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE	SPECIAL

DIMENSIONS in inches [millimeters]

FSOT10 / FSOT15 / FSOT30



FSOT30 / FSOT40 / FSOT55 / FSOT65 / FSOT70 / FSOT75 / FSOT95

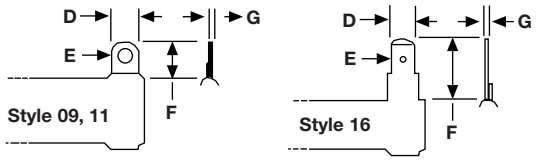


MODEL	A ± 0.063 [1.59]	B ± 0.063 [1.59]	C ± 0.031 [0.79]	DISTANCE CENTER TO CENTER (REF.)	TERMINAL DESIGNATION	
					STANDARD	OPTIONAL (QUICK CONNECT)
FSOT10	0.750 [19.05]	1.312 [33.32]	1.000 [25.40]	0.531 [13.49]	11	-
FSOT15	1.000 [25.40]	1.562 [39.67]	1.250 [31.75]	0.781 [19.84]	11	-
FSOT20	2.062 [52.37]	2.625 [66.68]	2.312 [58.72]	1.843 [46.81]	11	-
FSOT30	1.250 [31.75]	2.500 [63.50]	2.000 [50.8]	0.906 [23.01]	09	16
FSOT40	2.000 [50.8]	3.250 [82.55]	2.750 [69.85]	1.656 [42.06]	09	16
FSOT55	3.500 [88.90]	4.750 [120.65]	4.250 [107.95]	3.156 [80.16]	09	16
FSOT65 / FSOT70 (1)	4.750 [120.65]	6.000 [152.4]	5.500 [139.7]	4.406 [111.91]	09	16
FSOT75 / FSOT95 (1)	6.000 [152.4]	7.250 [184.15]	6.750 [171.45]	5.656 [143.66]	09	16

Note

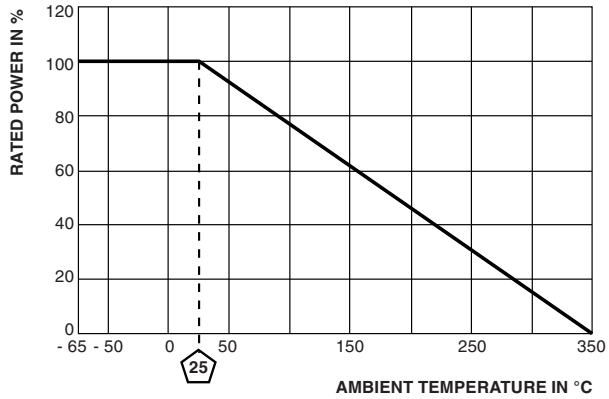
(1) The preferred Models are the FSOT70 and FSOT95. FSOT65 and FSOT75 are being shown as they have historically been used for these two wattages.

TERMINAL DIMENSIONS



DIMENSIONS	STYLE 09	STYLE 11	STYLE 16
D	0.188 [4.76]	0.125 [3.18]	0.188 [4.76]
E (HOLE DIAMETER)	0.106 [2.69]	0.081 [2.10]	0.050 [1.27]
F	0.438 [11.13]	0.235 [5.97]	0.563 [14.30]
G	0.020 [0.51]	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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Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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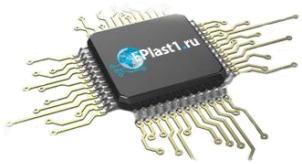
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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