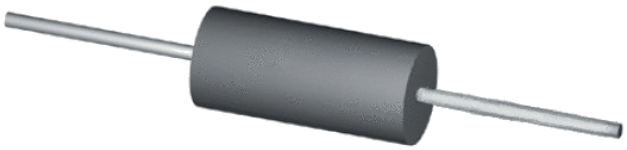
Wirewound Resistor, Ultra Precision, Epoxy Molded, Axial Lead



FEATURES

- Resistance values up to 6 MΩ
- Resistance tolerances down to ± 0.005 %
- Tighter tolerances and lower resistance values available, please contact factory
- Temperature coefficients down to ± 2 ppm/°C, and up to 6000 ppm/°C
- Matched resistance sets available in tolerances down to ± 0.001 %, and in temperature coefficients down to ± 0.5 ppm/°C, please contact factory
- Custom design capability available, please contact factory
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

e3

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING W (1)	RESISTANCE RANGE Ω ± 0.1 %, ± 0.25 %, ± 0.5 %, ± 1 %	RESISTANCE RANGE Ω ± 0.05 %, ± 0.1 %, ± 0.25 %, ± 0.5 %, ± 1 %	RESISTANCE RANGE Ω ± 0.01 %, ± 0.05 %, ± 0.1 %, ± 0.25 %, ± 0.5 %, ± 1 %	RESISTANCE RANGE Ω ± 0.005 %, ± 0.01 %, ± 0.05 %, ± 0.1 %, ± 0.25 %, ± 0.5 %, ± 1 %	MAXIMUM WORKING VOLTAGE V (2)
MR101	0.120	1 to 400K	5 to 400K	50 to 400K	1K to 400K	150
MR102	0.175	1 to 750K	5 to 750K	50 to 750K	1K to 750K	200
MR103	0.200	1 to 750K	5 to 750K	50 to 750K	1K to 750K	200
MR104	0.150	1 to 500K	5 to 500K	50 to 500K	1K to 500K	100
MR105	0.200	1 to 1.0M	5 to 1.0M	50 to 1.0M	1K to 1.0M	200
MR106	0.250	1 to 1.2M	5 to 1.2M	50 to 1.2M	1K to 1.2M	300
MR107	0.330	1 to 2.5M	5 to 2.5M	50 to 2.5M	1K to 2.5M	400
MR108	0.400	1 to 3.8M	5 to 3.8M	50 to 3.8M	1K to 3.8M	300
MR110	0.500	1 to 3.8M	5 to 3.8M	50 to 3.8M	1K to 3.8M	400
MR111	0.500	1 to 3.8M	5 to 3.8M	50 to 3.8M	1K to 3.8M	400
MR112	0.750	1 to 6.0M	5 to 6.0M	50 to 6.0M	1K to 6.0M	600
MR114	1.000	1 to 6.0M	5 to 6.0M	50 to 6.0M	1K to 6.0M	800
MR115	1.500	1 to 6.0M	5 to 6.0M	50 to 6.0M	1K to 6.0M	900
MR116	2.000	1 to 6.0M	5 to 6.0M	50 to 6.0M	1K to 6.0M	1000

Notes

(1) Power rating is based on tolerance, please see derating chart.

(2) The maximum working voltage is the highest voltage that can be applied to the resistor. Below this value, the maximum voltage that can continuously be applied is given by $(P \times R)^{1/2}$.

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: MR106250R00TAE66 (visit www.vishay.net SAP parts manual for all options)

M	R	1	0	6	2	5	0	R	0	0	T	A	E	6	6		

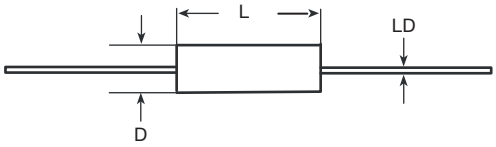
GLOBAL MODEL (5 digits)	VALUE (6 digits)	TOLERANCE (1 digit)	TC (1 digit)	PACKAGING CODE (3 digits)	SPECIAL (up to 2 digits)
(see Standard Electrical Specifications Global Model column for options)	**R** = decimal **K** = thousand **M** = million **1R5000** = 1.5 Ω **1K5000** = 1.5 kΩ **1M0000** = 1 MΩ	**S** = ± 0.005 % **T** = ± 0.01 % **Q** = ± 0.02 % **A** = ± 0.05 % **B** = ± 0.1 % **C** = ± 0.25 % **D** = ± 0.5 % **F** = ± 1.0 %	**A** = standard, 10 to 30 (W) **B** = 3900 (Q) **C** = 4500 (M) **D** = 6000 (N) **E** = 3500 (P) **Y** = 10 (≥ 1 Ω) **G** = 5 (≥ 10 Ω) **J** = 2 (≥ 100 Ω)	**E66** = lead (Pb)-free bulk pack	(dash number) From **1** to **99** as applicable **S** = 0.025" terminal

Historical Part Number example: MR106W250R0T

MR106	W = STANDARD	250 Ω	0.01 %
HISTORICAL MODEL	TC	RESISTANCE VALUE	TOLERANCE

For technical questions, contact: ww2aresistors@vishay.com

DIMENSIONS in inches [millimeters]



GLOBAL MODEL	DIMENSIONS in inches [millimeters]		
	L ± 0.025 [0.635]	D ± 0.005 [0.127]	LD ± 0.002 [0.051]
MR101	0.250 [6.35]	0.187 [4.75]	0.025 [0.635]
MR102	0.375 [9.52]	0.187 [4.75]	0.025 [0.635]
MR103	0.450 [11.43]	0.187 [4.75]	0.025 [0.635]
MR104	0.250 [6.35]	0.250 [6.35]	0.025 [0.635]
MR105	0.375 [9.52]	0.250 [6.35]	0.032 [0.813] (1)
MR106	0.500 [12.70]	0.250 [6.35]	0.032 [0.813] (1)
MR107	0.750 [19.05]	0.250 [6.35]	0.032 [0.813] (1)
MR108	0.500 [12.70]	0.375 [9.52]	0.032 [0.813]
MR110	0.750 [19.05]	0.375 [9.52]	0.032 [0.813]
MR111	0.750 [19.05]	0.375 [9.52]	0.032 [0.813]
MR112	1.000 [25.40]	0.375 [9.52]	0.032 [0.813]
MR114	1.000 [25.40]	0.500 [12.70]	0.032 [0.813]
MR115	1.500 [38.10]	0.500 [12.70]	0.032 [0.813]
MR116	2.000 [50.80]	0.500 [12.70]	0.032 [0.813]

Note

(1) 0.025" [0.635] available, this is called out by putting an “S” in the SPECIAL section of the part number.

MATERIAL SPECIFICATIONS

Element: nickel-chrome alloy, other materials available depending on TC requirements

Core: molded epoxy

Encapsulant: epoxy

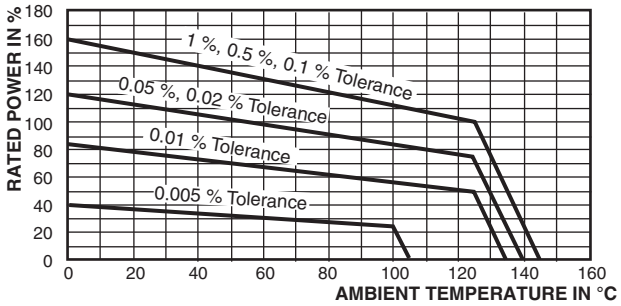
Standard Terminals: 100 % matte tinned copper

Part Marking: Mills, model, value, tolerance, date code

Note

- Due to resistor size limitations some resistors will have minimal information marked on parts

DERATING



TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	MR100 RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 10 for > 100 Ω; ± 20 for 10 Ω to 100 Ω; ± 30 for < 10 Ω
Terminal Strength	lb	4.5
Dielectric Withstanding Voltage	V_{AC}	750
Operating Temperature Range	°C	-55 to +145 (see derating chart)

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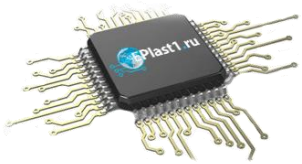
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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