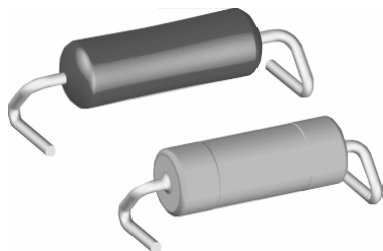


Wirewound Resistors, Surface Mount, Silicone or Cement Coated, High Power



FEATURES

- Low cost, high power (up to 3.75 W)
- All welded construction
- Ideal for pulsing application
- Ceramic core
- Available on tape and reel
- AEC-Q200 qualified available ⁽¹⁾
- Compliant to RoHS Directive 2002/95/EC

Note

⁽¹⁾ Flame retardance test may not be applicable to some resistor technologies.

AUTOMOTIVE
GRADE
Available



Pb-free
Available

e3

RoHS*
COMPLIANT
GREEN
(5-2009)**
Available

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{25^{\circ}\text{C}}$ W	RESISTANCE RANGE ⁽²⁾ Ω TCR - 10 ... - 80 ppm/K ⁽³⁾ (CLASS 1)	RESISTANCE RANGE ⁽²⁾ Ω TCR 100 ... 180 ppm/K (CLASS 3)	RESISTANCE RANGE Ω TCR ± 50 ppm/ $^{\circ}\text{C}$	RESISTANCE RANGE Ω TCR ± 30 ppm/ $^{\circ}\text{C}$	TOLERANCE $\pm \%$	WEIGHT (typical) g	ENCAPS.
WSZ6720	6720	1.8 ⁽⁴⁾	1 to 510	n/a	n/a	n/a	1	0.6	Cement
			0.22 to 510	n/a	n/a	n/a	2		
			0.10 to 510	24 to 3.3K	n/a	n/a	5		
			0.10 to 510	1.8 to 3.3K	n/a	n/a	10		
WSZ7532	7532	3.75	n/a	n/a	n/a	10 to 15K	1, 3	0.7	Silicone
			n/a	n/a	1 to 9.99	10 to 15K	5, 10		

Notes

⁽²⁾ Lower TCR or other power range on request. Resistance value to be selected for $\pm 10 \%$ tolerance from E12 and for $\pm 5 \%$ from E24.

⁽³⁾ $\leq 1 \Omega \leq 400$ ppm/K.

⁽⁴⁾ Power rating depends on the maximum temperature at the solder point, solder pad dimensions, the component placement density and the substrate material.

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: **WSZ672011509KBM000**

W **S** **Z** **6** **7** **2** **0** **1** **1** **5** **0** **9** **K** **B** **M** **0** **0** **0**

GLOBAL MODEL	TCR/MATERIAL	VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
WSZ6720	1 = - 10 ... - 80 ppm/K WM 50 Class 1 3 = 100 ... 180 ppm/K WM 110 Class 3	3 digit value 1 digit multiplier MULTIPLIER 7 = $\times 10^{-3}$ 8 = $\times 10^{-2}$ 9 = $\times 10^{-1}$ 0 = $\times 10^0$ 1 = $\times 10^1$ 2 = $\times 10^2$ 3 = $\times 10^3$	F = $\pm 1.0 \%$ G = $\pm 2.0 \%$ J = $\pm 5.0 \%$ K = $\pm 10.0 \%$	BM = Lead (Pb)-free, tape/reel LX = Lead (Pb)-free, bulk	3 digits 000 = Standard

Historical Part Numbering example: **WSZ6720 WM 50 15 Ω 10 % BM**

WSZ6720	WM 50	15 Ω	10 %	BM
HISTORICAL MODEL	TCR/MATERIAL	VALUE	TOLERANCE CODE	PACKAGING

Global Part Numbering example: **WSZ75321K000JTA**

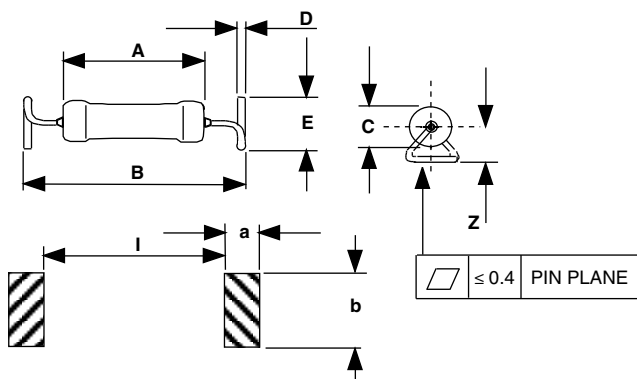
W **S** **Z** **7** **5** **3** **2** **1** **K** **0** **0** **0** **J** **T** **A**

GLOBAL MODEL	VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
WSZ7532	R = Decimal K = Thousand 54R15 = 54.15 Ω 1K325 = 1325 Ω	F = $\pm 1.0 \%$ G = $\pm 2.0 \%$ H = $\pm 3.0 \%$ J = $\pm 5.0 \%$ K = $\pm 10 \%$	EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk TA = Tin/lead, tape/reel BA = Tin/lead, bulk	(Dash number) (Up to 3 digits) From 1 to 999 as applicable

* Pb containing terminations are not RoHS compliant, exemptions may apply

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

DIMENSIONS



MODEL	DIMENSIONS in millimeters [inches]					
	A _{max.}	B	C _{max.}	D _{nom.}	E	Z
WSZ6720	13.2 [0.512]	17 ± 0.5 [0.670]	4.8 [0.189]	0.8 [0.031]	5 ± 0.5 [0.20 ± 0.02]	3.6 ± 0.5 [0.142 ± 0.02]
WSZ7532	14.27 [0.562]	19.86 [0.782]	4.78 [0.188]	0.813 [0.032]	8.18 [0.322]	6.5 [0.256]

MODEL	SOLDER PAD DIMENSIONS in millimeters [inches]		
	a	b	l
WSZ6720	10 [0.394]	10 [0.394]	14.5 [0.57]
WSZ7532	4.0 [0.157]	9.50 [0.374]	15.05 [0.593]

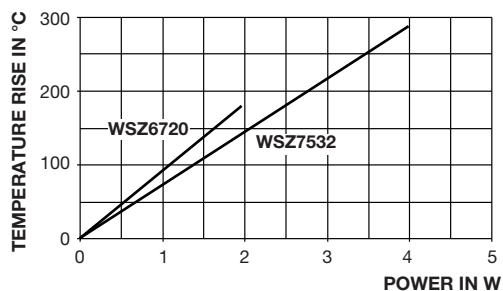
TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	WSZ6720	WSZ7532
Temperature Coefficient	ppm/°C	See Standard Electrical Specifications table	
Operating Temperature Range	°C	- 55 to + 250	- 65 to + 350
Maximum Working Voltage	V	$(P \times R)^{1/2}$	
Terminal Strength	lb	10 minimum	

PERFORMANCE

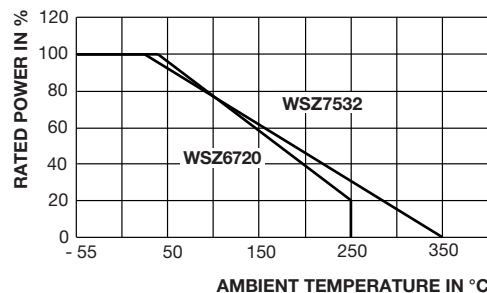
TEST	CONDITIONS OF TEST	TEST LIMITS	
		WSZ6720	WSZ7532
Temperature Cycling	- 55 °C to + 125 °C, 5 cycles, 15 min at each extreme	± 3 % ΔR	± (2 % + 0.05 Ω) ΔR
High Temperature Exposure	1000 h at + 250 °C	± 3 % ΔR	± (2 % + 0.05 Ω) ΔR
Short Time Overload	5 x rated power for 5 s	± 1 % ΔR	± (2 % + 0.05 Ω) ΔR
Shock, Specified Pulse	100 g's for 6 ms, 10 shocks	± 1 % ΔR	± (2 % + 0.05 Ω) ΔR
Vibration, High Frequency	Frequency varied 10 Hz to 2000 Hz, 20 g peak, 2 directions 6 h each	± 1 % ΔR	± (2 % + 0.05 Ω) ΔR
Load Life	2000 h at rated power, + 25 °C, 1.5 h "ON", 0.5 h "OFF"	± 3 % ΔR	± (3 % + 0.05 Ω) ΔR
Resistance to Soldering Heat	+ 260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence	± 1 % ΔR	± (0.5 % + 0.05 Ω) ΔR

TEMPERATURE RISE



Measurement based on recommended solder pads

DERATING



PACKAGING

MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSZ6720	24 mm	330 mm	1250	BM
WSZ7532 ⁽¹⁾	32 mm/embossed plastic	330 mm/13"	350	EA/TA

Note

⁽¹⁾ Embossed carrier tape per EIA-481.



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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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