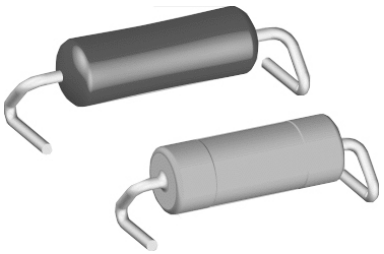
Wirewound Resistors, Surface Mount, Silicone or Cement Coated, High Power



FEATURES

- Low cost, high power (up to 3.75 W)
- All welded construction
- Ideal for pulsing application
- Ceramic core
- Available on tape and reel
- Lead (Pb)-free version is RoHS compliant
- Compliant to RoHS directive 2002/95/EC

Pb-free Available

RoHS* COMPLIANT

GREEN (5-2008)** Available

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING $P_{25\,°C}$ W	RESISTANCE RANGE (1) Ω		RESISTANCE RANGE Ω		TOLERANCE ± %	ENCAPSULATION
		TCR - 10 ... - 80 ppm/K (2) (CLASS 1)	TCR 100 ... 180 ppm/K (CLASS 3)	TCR ± 50 ppm/°C	TCR ± 30 ppm/°C		
WSZ6720	1.8 (3)	1 to 510 0.22 to 510 0.10 to 510 0.10 to 510	- - 24 to 3.3k 1.8 to 3.3k	- - - -	- - - -	1 2 5 10	Cement
WSZ7532	3.75	- -	- -	- 1 to 9.99	10 to 15k 10 to 15k	1, 3 5, 10	Silicone

Notes

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

(2) ≤ 1 Ω ≤ 400 ppm/K

(3) 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

Part Number: 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** = $*10^{-3}$ **8** = $*10^{-2}$ **9** = $*10^{-1}$ **0** = $*10^{0}$ **1** = $*10^{1}$ **2** = $*10^{2}$ **3** = $*10^{3}$	**F** = ± 1.0 % **G** = ± 2.0 % **J** = ± 5.0 % **K** = ± 10.0 %	**BM** = Lead (Pb)-free, tape/reel **LX** = Lead (Pb)-free, bulk	3 digits **000** = Standard

Product Description: WSZ6720 WM 50 15 Ω 10 % BM

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

Part Number: 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** = ± 1.0 % **G** = ± 2.0 % **H** = ± 3.0 % **J** = ± 5.0 % **K** = ± 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

Product Description: WSZ7532 1 kΩ 5 % TA

WSZ7532	1 kΩ	5 %	TA
HISTORICAL MODEL	VALUE	TOLERANCE CODE	PACKAGING

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

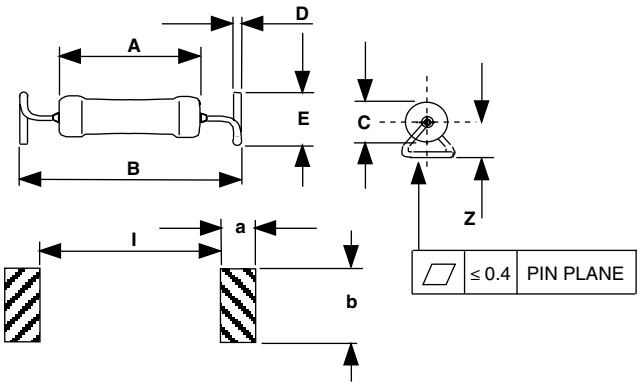
** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

For technical questions on the WSZ6720, contact: ww1resistors@vishay.com
For technical questions on the WSZ7532, contact: ww2aresistors@vishay.com

Document Number: 30246
Revision: 03-Mar-10

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

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)

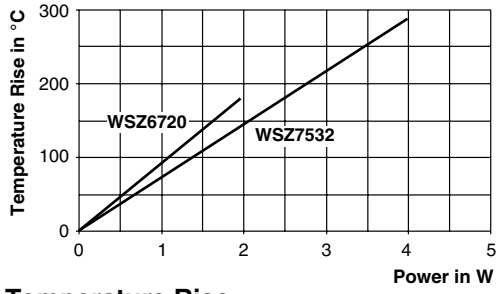
MODEL	SOLDER PAD DIMENSIONS in millimeters (inches)		
	a	b	l
WSZ6720	10 (0.394)	10 (0.394)	14.5 (0.57)
WSZ7532	4.0 (0.157)	9.50 (0.374)	15.05 (0.593)

TECHNICAL SPECIFICATIONS

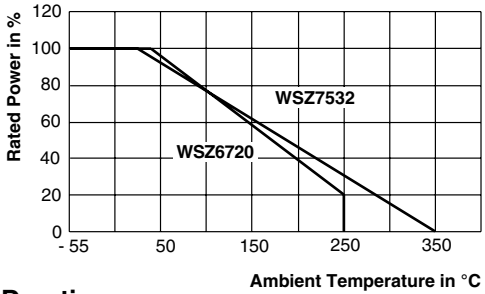
PARAMETER	UNIT	WSZ6720	WSZ7532
Operating Temperature Range	°C	- 55/+ 250	- 65/+ 350
Maximum Working Voltage	V	$(P \times R)^{1/2}$	$(P \times R)^{1/2}$
Weight (Typical)	g	0.6	0.7
Terminal Strength	lb	10 minimum	10 minimum

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	± (0.2 % + 0.05 Ω) ΔR
Vibration, High Frequency	Frequency varied 10 Hz to 2000 Hz, 20 g peak, 2 directions 6 h each	± 1 % ΔR	± (0.2 % + 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 latest revision of EIA-481-3

Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.