

Leaded Wirewound Resistors, Surface Mount, Cement Coated, High Power



FEATURES

- SMT compatible termination
- All welded construction
- Ideal for pulsing application
- Ceramic core
- Available on tape and reel
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

HALOGEN
FREE
Available

GREEN
(5-2008)
Available

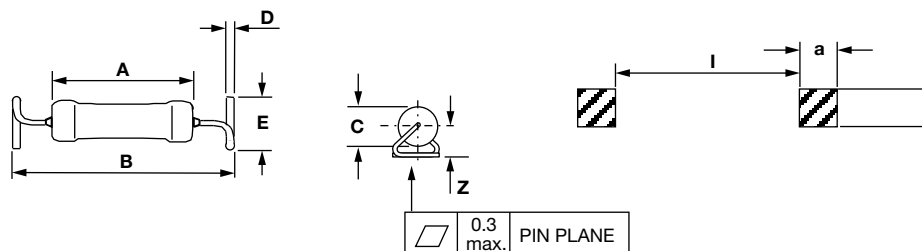
STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	SIZE	POWER RATING $P_{40^\circ\text{C}}$ W	RESISTANCE RANGE ⁽¹⁾ Ω TCR (-10 to -80) ppm/K ⁽²⁾ (CLASS 1)	RESISTANCE RANGE ⁽¹⁾ Ω TCR (100 to 180) ppm/K (CLASS 3)	TOLERANCE \pm %	WEIGHT (typical) g
WSZ6720	6720	1.8 ⁽³⁾	1 to 510	n/a	1	0.6
			0.22 to 510	n/a	2	
			0.10 to 510	24 to 3.3K	5	
			0.10 to 510	1.8 to 3.3K	10	

Notes

- (1) Resistance value to be selected for ± 10 % tolerance from E12 and for ± 5 % from E24
- (2) $\text{TCR} \leq 400$ ppm/K for $R \leq 1 \Omega$
- (3) Power rating depends on the maximum temperature at the solder point, solder pad dimensions, the component placement density and the substrate material
- (4) For automotive applications, please consider AC03-AT WSZ: www.vishay.com/doc?28730

PART NUMBER AND PRODUCT DESCRIPTION																	
Part Number: WSZ672011509KBM000																	
W	S	Z	6	7	2	0	1	1	5	0	9	K	B	M	0	0	0
MODEL		TCR / MATERIAL			VALUE			TOLERANCE CODE			PACKAGING			SPECIAL			
WSZ6720		1 = (-10 to -80) ppm/K WM 50 class 1 3 = (100 to 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			3 digits 000 = standard			
Product Description: WSZ6720 1 15R 10 % BM																	
WSZ6720		1			15 R			10 %			BM						
TYPE / SIZE		TCR / MATERIAL			VALUE			TOLERANCE CODE			PACKAGING						

DIMENSIONS



MODEL	DIMENSIONS in millimeters (inches)					
	A	B	C	D	E	Z
WSZ6720	13.2 max. (0.520 max.)	17 ± 0.5 (0.670)	4.8 max. (0.189 max.)	0.8 max. (0.031 max.)	5 ± 0.5 (0.20 ± 0.02)	3.6 ± 0.5 (0.142 ± 0.02)

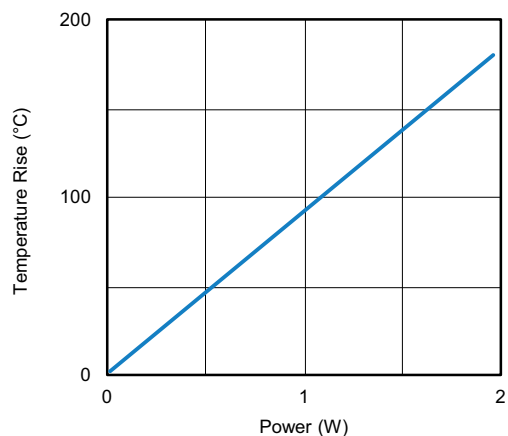
MODEL	SOLDER PAD DIMENSIONS in millimeters (inches)		
	a	b	l
WSZ6720	10.0 (0.394)	10.0 (0.394)	11.5 (0.453)

TECHNICAL SPECIFICATIONS							
Size	6720						
Resistance Range	1 Ω to 510 Ω	0.10 Ω to 510 Ω	0.22 Ω to 510 Ω	24 Ω to 3.3 kΩ	1.8 Ω to 3.3 kΩ		
Tolerance	± 1 %	± 5 %, ± 10 %	± 2 %	± 5 %	± 10 %		
Temperature Coefficient	-10 ppm/K to -80 ppm/K			100 ppm/K to 180 ppm/K			
Rated Dissipation, P_{40}	1.8 W						
Operating Temperature Range	-55 °C to +250 °C						
Maximum Working Voltage	$\sqrt{P \times R}$						
Terminal Strength	45 N minimum						

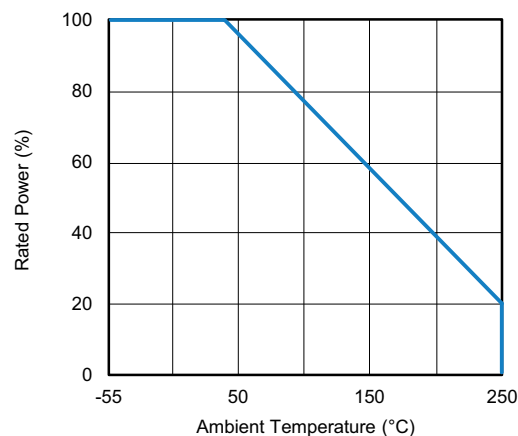
PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS $\Delta R_{max.}$
Temperature Cycling	-55 °C to +125 °C, 5 cycles, 15 min at each extreme	± (3 % R + 0.05 Ω)
High Temperature Exposure	1000 h at + 250 °C	± (3 % R + 0.05 Ω)
Short Time Overload	5 x rated power for 5 s	± (1 % R + 0.05 Ω)
Shock, Specified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



TEMPERATURE RISE (1)



DERATING



Note

(1) Measurement based on recommended solder pads

PACKAGING

MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSZ6720	24 mm	330 mm	1250	BM



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