



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 $\pm 10 \%$ tolerance from E12 and for $\pm 5 \%$ from E24
- (2) $R \leq 1 \Omega \leq 400 \text{ ppm/K}$
- (3) Power rating depends on the maximum temperature at the solder point, solder pad dimensions, the component placement density and the substrate material
- (4) WSZ6720 is not recommended for new designs. Replacement is AC03-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

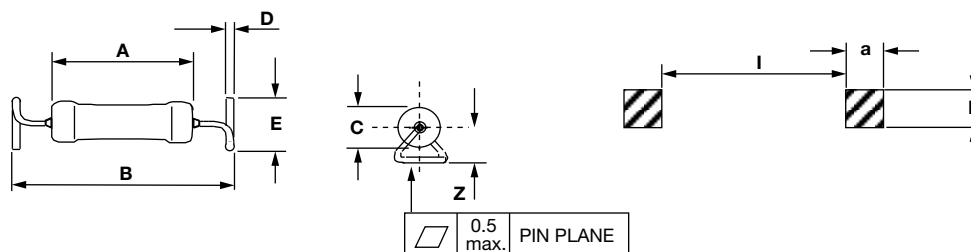
MODEL	TCR / MATERIAL	VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
WSZ6720	<p>1 = (-10 to -80) ppm/K WM 50 class 1</p> <p>3 = (100 to 180) ppm/K WM 110 class 3</p>	<p>3 digit value 1 digit multiplier MULTIPLIER</p> <p>7 = $\times 10^{-3}$ 8 = $\times 10^{-2}$ 9 = $\times 10^{-1}$ 0 = $\times 10^0$ 1 = $\times 10^1$ 2 = $\times 10^2$ 3 = $\times 10^3$</p>	<p>F = $\pm 1.0 \%$ G = $\pm 2.0 \%$ J = $\pm 5.0 \%$ K = $\pm 10.0 \%$</p>	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)

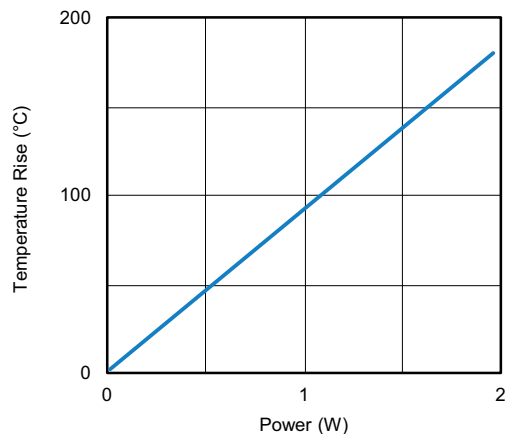
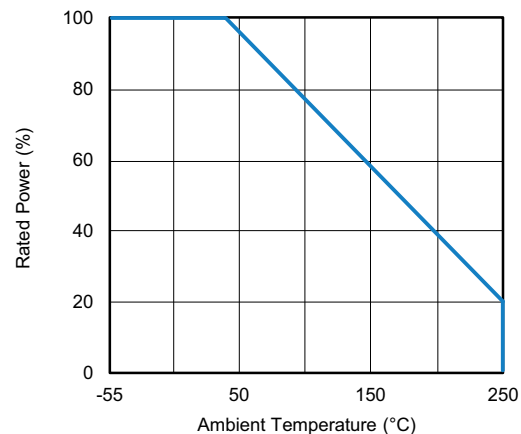
MODEL	SOLDER PAD DIMENSIONS in millimeters (inches)		
	a	b	l
WSZ6720	10.0 (0.394)	10.0 (0.394)	11.5 (0.453)

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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