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

Pb-free Available

RoHS COMPLIANT

HALOGEN FREE Available

GREEN (5-2008) Available

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{40\,°C}$ 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 ± %	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) R ≤ 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

(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

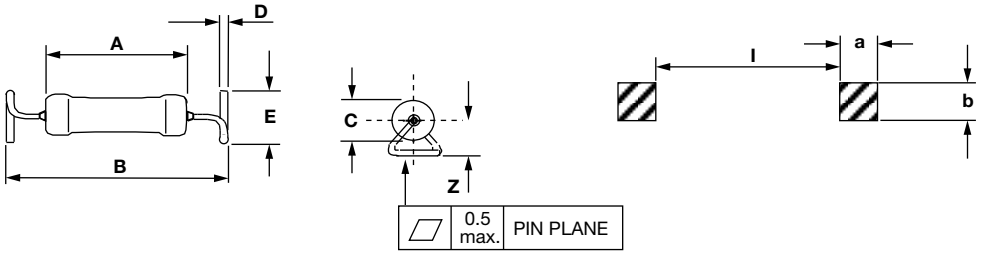
W	S	Z	6	7	2	0	1	1	5	0	9	K	B	M	0	0	0

MODEL	TCR / MATERIAL	VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
WSZ6720	**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)

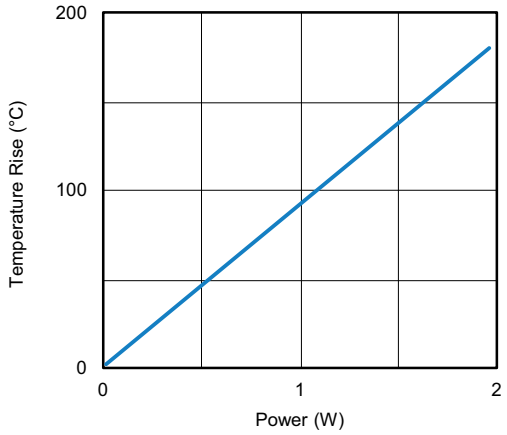
TECHNICAL SPECIFICATIONS

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				

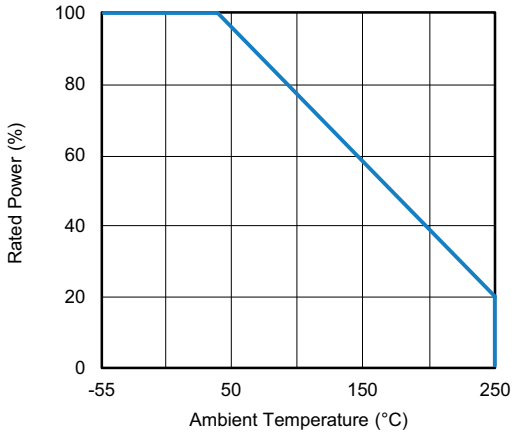
PERFORMANCE

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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