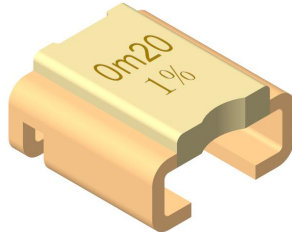




**Square Hole Type Beam Welding Alloy Resistors, 4 Terminal Chip,  
For current sensing, Excellent long-term stability, Passed AEC-Q200  
automotive grade reliability test.**



**Product Features:**

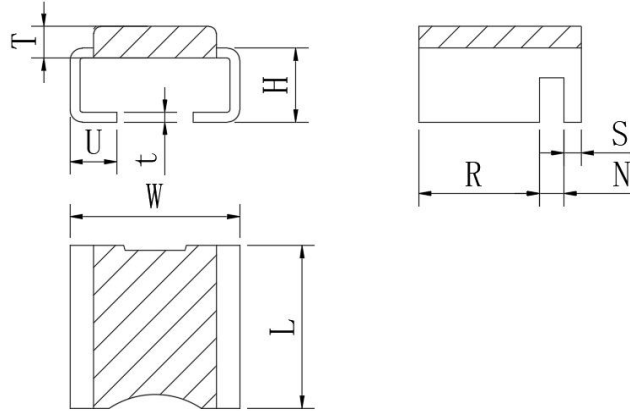
- Electron beam welding process, 4-terminal structure, pure copper electrode, ideal solution for current detection applications.
- Good product consistency, reliability, high stability, high pulse resistance, support  $\pm 0.5\%$  resistance tolerance.
- Passed AEC-Q200 automotive grade reliability test.
- Comply with RoHS and other environmental requirements.
- Support special specification customization.

Electrical specifications:	
Resistance value	0.2 ~ 5 mOhm
Resistance tolerance	$\pm 0.5\%$ (D), $\pm 1\%$ (F), $\pm 5\%$ (J)
Resistance temperature coefficient	MIN 25 ppm/°C
Operating temperature range	-55°C +175°C
Inductance	<3nH
Thermal EMV (0-100°C)	<1 $\mu$ V/°C
Power rating P70°C	MAX 12W

Selection Examples: WHFL2726ML200FT0		WHFL2726 Manganese copper 0.2mohm 1%															
W	S	K	N	2	7	2	6	M	L	2	0	0	F	T	0		
WHFL E-Beam Welded Metal Strip 4-Terminal				Size 2726				Materials F: Ferrochrome aluminum K: Karma M: Manganese Copper				Resistance Value: L200 = 0.2m $\Omega$ R001 = 1m $\Omega$		Tolerance D = $\pm 0.5\%$ F = $\pm 1\%$ J = $\pm 5\%$		Code T0: Braided Standards B0: Bulk Tx: special code (x : 0~9)	

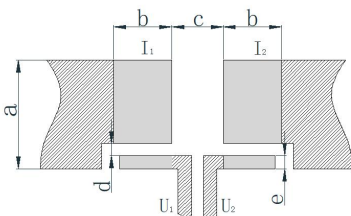


**Product specifications and dimensions (in mm):**



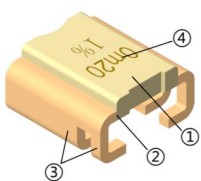
Model number	Resistance value	Accuracy	L (mm)	W (mm)	R (mm)	N (mm)	S(mm)	U(mm)	H(mm)
WHFL2726	0.2 ~ 5mΩ	±0.5% ±1% ±5%	6.6 <sup>+0.35</sup> <sub>-0.2</sub>	6.9±0.3	4.9±0.2	1.0±0.15	0.7±0.1	1.9±0.1	3.0±0.3

**Recommended pads and dimensions (in mm):**



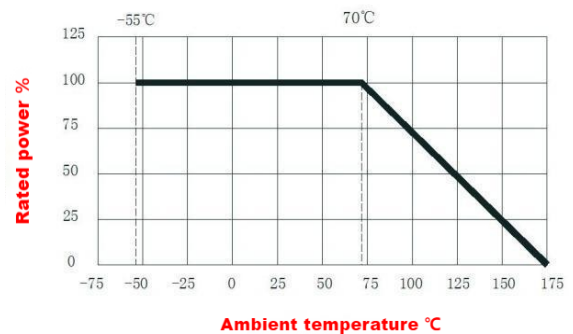
Series number	Resistance value	a (mm)	b (mm)	c (mm)	d(mm)	e(mm)
WHFL2726	0.2 ~ 5mΩ	7.3	2.9	2	0.8	0.9

**Beam welding alloy resistor structure:**



1. Resistive elements: manganese copper, kama, ferrochrome alloy body, low TCR (<20ppm/°C).
2. Stable and reliable electron beam welding structure.
3. Pure purple copper four-terminal sampling.
4. laser engraved marking.

**Power consumption curve**





**Resistance value schedule:**

Resistance value	Material	T/mm	t/mm	TCR(ppm)	P <sub>70°C</sub>	Resistance value	Material	T/mm	t/mm	TCR(ppm)	P <sub>70°C</sub>
0.2mΩ	M	1.3±0.1	0.6±0.1	±75	12	3mΩ	F	0.36±0.1	0.4±0.1	±25	5
0.3mΩ	M	1.2±0.1	0.6±0.1	±75	11	4mΩ	F	0.28±0.1	0.4±0.1	±25	4
0.5mΩ	M	0.68±0.1	0.68±0.1	±75	9	5mΩ	F	0.28±0.1	0.4±0.1	±25	3
0.7mΩ	M	0.48±0.1	0.48±0.1	±75	7	2mΩ	K	0.52±0.1	0.52±0.1	±50	6
1mΩ	M	0.35±0.1	0.4±0.1	±75	6	3mΩ	K	0.35±0.1	0.4±0.1	±50	5
2mΩ	F	0.55±0.1	0.55±0.1	±25	6	4mΩ	K	0.26±0.1	0.4±0.1	±50	4

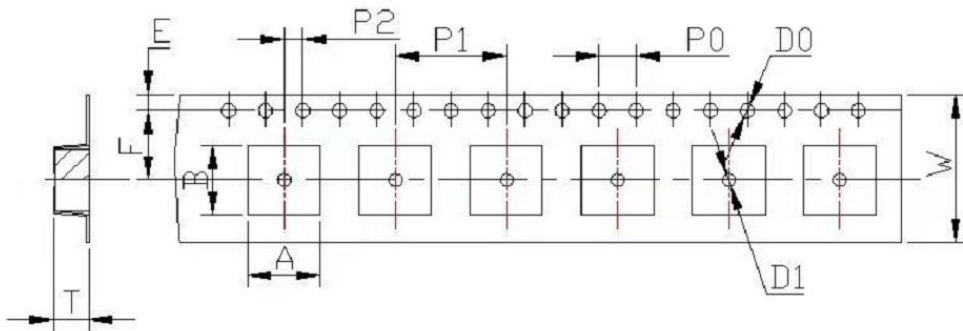
Note: Iron chrome aluminum material is magnetic, which affects the frequency conversion current, please be careful in product selection.

**Performance index**

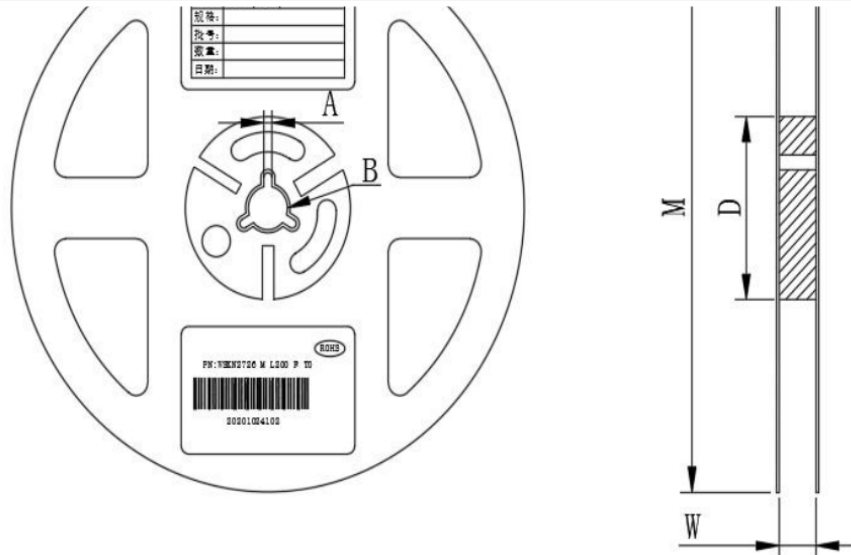
Item	Standards	Test method
Temperature coefficient	Within specified values	IEC60115-1bis 4.8, measurement points -55°C and +125°C, reference point +20°C
Solderability	No visible damage, solderable area 95%Minimum	IEC60115-1bis 4.17, tin bath at 245°C, hold for 3 seconds
Short time overload	No visible damage ΔR±0.5%Minimum	IEC60115-1bis 4.13, 2.5 times rated voltage, hold for 5 seconds
Resistance to soldering heat	No visible damage ΔR±0.5%Minimum	IEC60115-1, 4.18, 270°C tin bath, hold 10 seconds
High temperature and humidity	No visible damage ΔR±1%Minimum	AEC-Q200Test7/MIL-STD-202method103 Apply 10% of rated power (current) or component limit current (whichever is less) for 1000 hours at 85°C and 85% humidity.
High temperature storage	No visible damage ΔR ± 0.5%Maximum	IEC60115-1bis 4.25.3, 1000 hours @ 170°C without loading
Low temperature loading	No visible damage ΔR ± 0.5%Maximum	IEC60115-1 no. 4.36, -55°C, one hour without load, 45 minutes at rated voltage load, 15 minutes without load.
Temperature cycling	No visible damage ΔR ± 0.5%Maximum	IEC60115-1bis 4.19, -55°C @ 30 minutes ~ room temperature @ < 5 minutes ~ +155°C @ 30 minutes; 500 cycles.
Load life	No visible damage ΔR±1%Maximum	4.25.1 of IEC60115-1, 1000 hours, 70°C±2°C, rated current or component limit current (whichever is smaller) 1.5 hours on / 0.5 hours off.



**Package specifications and dimensions (unit/mm):**



Type	A	B	W	E	F	P0	P1	P2	ΦD0	T	Quantity
WHFL2726	7.8	7.5	16	1.75	7.5	4	12	2	1.5	3.8	1000



Reel Type	W	M	A	B	D
13" reel for 16mm tape	17±0.5	Φ330±2.0	2.0±0.5	Φ13.5±0.5	Φ60.0±1.0

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