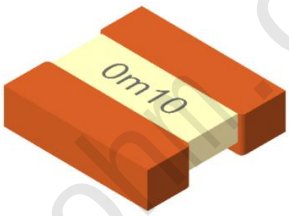
https://holly-ohm.com E-beam welding current sensing alloy resistor

Square E-beam Welding Alloy Resistor

Current sensing, SMD, Excellent stability, AEC-Q200

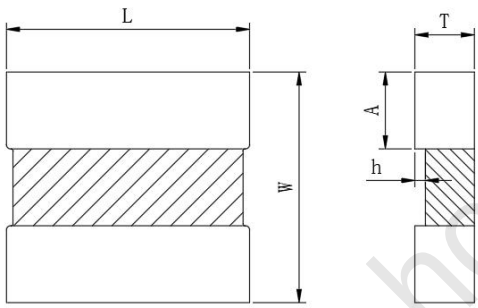


Features:

- Electron-beam welding craf , pure copper electrode , Ideal solution for current detection applications.
- high reliability and long-term stability ,superb pulse load capability
- All-metal structure, surface pickling and passivation treatment, vulcanization resistance, strong weather resistance
- Ultra-low parasitic inductance, fast response , suitable for high frequency AC current detection
- RoHS compliant
- customization

parameter:	
resistance value	0.1mΩ~0.3mΩ
tolerance	±0.5%(D),±1%(F),±5%(J)
TCR	150ppm
temperature range	-55℃~+170℃
inductance	<1nH
thermal EMF (0-100°C)	<1 μV/°C
power ($P_{70℃}$)	MAX 12W

Dimensions(mm):

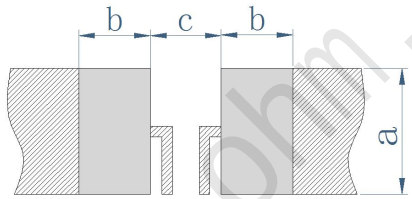


series	power($P_{70℃}$)	material	resistance value	tolerance	TCR	L (mm)	W (mm)	A (mm)	h (mm)	T(mm)
WSN2726	12W	M	0.1mΩ-0.2mΩ	±1%(F) ±5%(J)	±150ppm	6.95±0.2	6.6±0.15	2.3±0.3	0.5±0.2	1.7±0.1

	11W	M	0.3mΩ		±150ppm	6.95±0.2	6.6±0.15	2.1±0.3	0.5±0.2	1.5±0.1

notice: word code marking as laser engraving,the "L" is used in the naming to indicate the mΩ and also show the decimal point position, which corresponds to the mark "m".for example: 0m20=0.2mΩ

Recommended pad and size(mm):



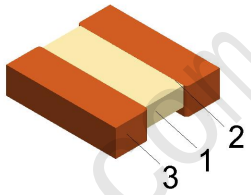
series	resistance value	a (mm)	b (mm)	c (mm)
WSN2726	0.1mΩ-0.3mΩ	7.95	3	1.6

Type Designation:WSN2726ML100FT0 WSN2726 Manganese copper 0.1mohm 1% package with tape and reel

W	S	N	2	7	2	6	M	L	1	0	0	F	T	0

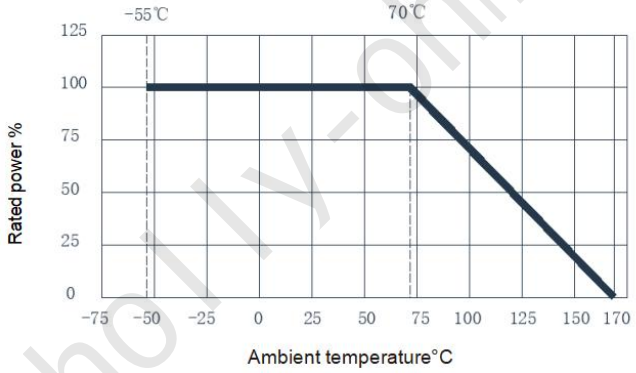
- WSN: Bare chip E-beam welding alloy resistor
- Size: 2726
- material: M: Manganese copper
- resistance value: L100 = 0.1mΩ
- tolerance: D=±0.5%, F=±1%, J=±5%
- code: T0: package with tape and reel; B0: without tape and reel; Tx: special code(x: 0~9)

Construction:



1.manganese copper , low TCR(<20ppm/℃)
2.electron-beam welding
3.pure copper electrode

Derating Curve:

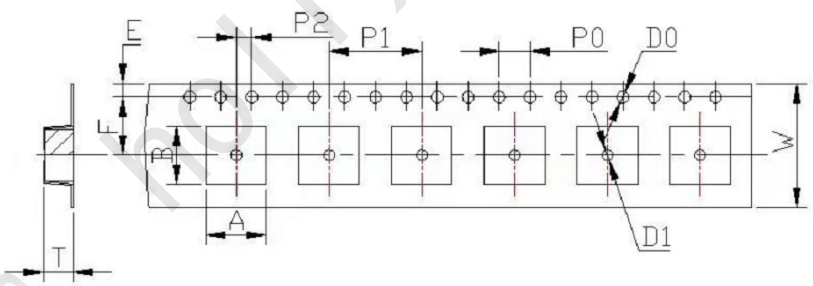


Performance:

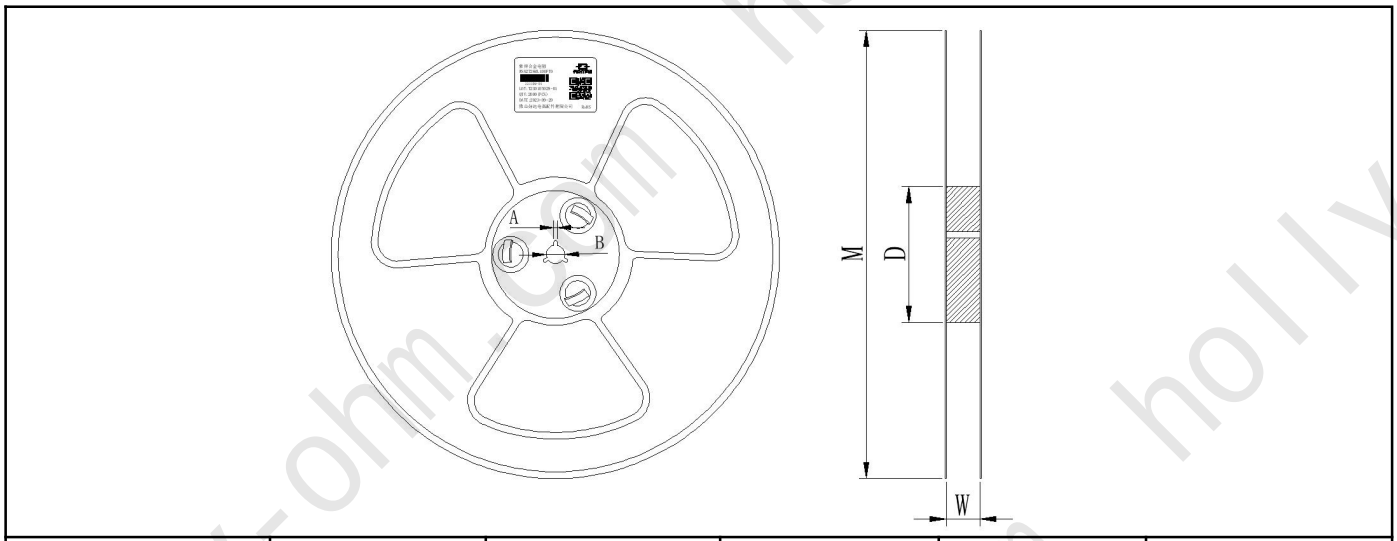
Test Item	standard	Test method

TCR	Within specified TCR	IEC60115-1 4.8，measured point 20°C～+130°C，reference point +20°C
Solderability	No visible damage Minimum 95%covered	IEC60115-1 4.17，245°C tin bath，3s
Short-time overload	No visible damage △R±1% Maximum	IEC60115-1 4.13，five times rated power，5s
Resistance to soldering heat	No visible damage △R±0.5% Maximum	IEC60115-1 4.18，260°C tin bath，10s
High temp. & high humidity	No visible damage△R±1% Maximum	Applying 10% of the rated power (current) or the maximum current of the component (whichever is lower) for a duration of 1000 hours in a temperature of 85°C and a humidity of 85% according to MIL-STD-202 method 103
High temperature storage	No visible damage△R±1% Maximum	IEC60115-1 4.25.3，1000hours@170°C，without loading current and voltage
Low temperature load	No visible damage △R±0.5%Maximum	IEC60115-1 4.36，cooled from room temperature to -55°C ,no load for 1.5 hours,applying rated power,continuously flowing for 45 minutes,cool for 15 minutes，then recover to room temperature for testing again.
temperature cycle	No visible damage △R±1% Maximum	IEC60115-1 4.19，-55°C@30mins～+155°C@30mins；1000 cycles
load life	No visible damage △R±1.0% Maximum	IEC 60115-1 4.25.1，1000hrs.，70℃±2℃，rated current, or the maximum current rating of the component (whichever is lower) is applied for 1.5 hours/0.5 hour interruption

Packing specifications and size (mm):



Type	A	B	W	E	F	P0	P1	P2	ΦD0	T	Quantity
2726	7.8	7.5	16	1.75	7.5	4	12	2	1.5	1.9	2000



Reel Type	W	M	A	B	D
13"reel for16mm tape	16.0±1.0	Φ330±2.0	2.0±0.5	Φ13.5±0.5	Φ99.0±1.0

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version update record

Version NO.	update record	person in charge	Issue date
A0	new version release	Sheguang Zhu	25Feb2022
A1	Update parameter and performance metrics	Qingke Zeng	7Oct2023