## **Low Resistance Metal Alloy Power Resistors**



#### **LRMAP4026**

#### **Features**

- 4-terminal Kelvin gullwing terminations
- Resistance range  $0.2m\Omega$  to  $3m\Omega$
- 5W rating in compact footprint
- Robust welded construction
- Low inductance
- AEC-Q200 qualified

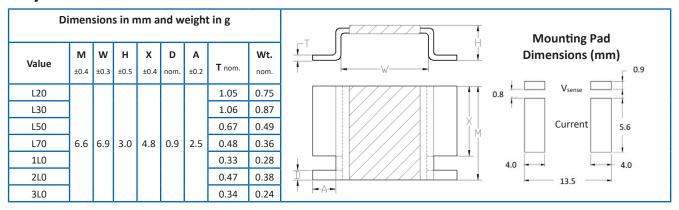


All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

### **Electrical Data**

		LRMAP4026						
Resistance value	mΩ	0.2	0.3	0.5	0.7	1.0	2.0	3.0
Power rating, P <sub>r100</sub>	W	5	5	5	5	5	5	4
Alloy		В			C			
Internal thermal impedance, Rthi	°C/W	4	5	7	9	13	16	20
TCR (resistive alloy)	ppm/°C	-40 to 0						
TCR (resistor)	ppm/°C	±75 ±50			50			
Resistance tolerance	%	±1						
Inductance	nH	< 3						
Ambient temperature range	°C	-65 to +170						

## **Physical Data**



#### Marking

The component is laser marked with ohmic value (using R to indicate decimal position in ohms) and tolerance.

#### **Solvent Resistance**

The component is resistant to all normal industrial cleaning solvents suitable for printed circuits.

#### Construction

The component is formed from a continuous band of E-beam welded precision resistive strip. Different resistance alloys are used based on the resistance value. The component is supplied without plating.

General Note

BI Technologies IRC Welwyn

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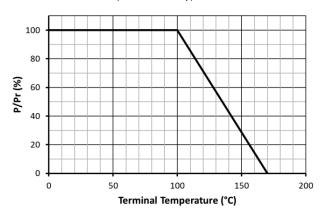
#### **LRMAP4026**

### **Performance Data**

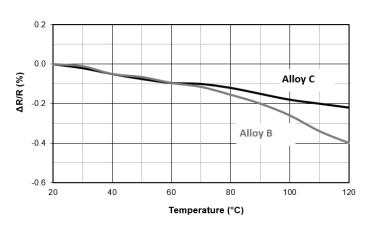
Test	Methods	Reference	ΔR
Load Life	1000 hours, cyclic load at TA =125°C, rated power per Temperature Derating graph below	MIL-STD-202 Method 108	±0.5%
Short Term Over- load	5 × P <sub>r100</sub> for 5 s	MIL-STD-202 Method 201	±0.5%
High Temperature Exposure	1000 hours, Ta=125°C, unpowered	MIL-STD-202 Method 108	±0.5%
Temperature Cycle	1000 cycles, -55°C to +125°C	JESD22 Method JA-104	±0.5%
Biased Humidity	1000 hours, 85°C/85%RH, 10% of P <sub>r100</sub>	MIL-STD-202 Method 103	±0.5%
Vibration	10 – 2000Hz, 5g, 20min, 12 cycles/axis x 3 axes	MIL-STD-202 Method 204	±0.5%
Resistance to Solder Heat	260 ± 5°C, 10 ± 1s	MIL-STD-202 Method 210	±0.5%
Solderability	235 ± 5°C, 2 ± 0.5s	J-STD-002	≥95% coverage

### **Temperature Derating**

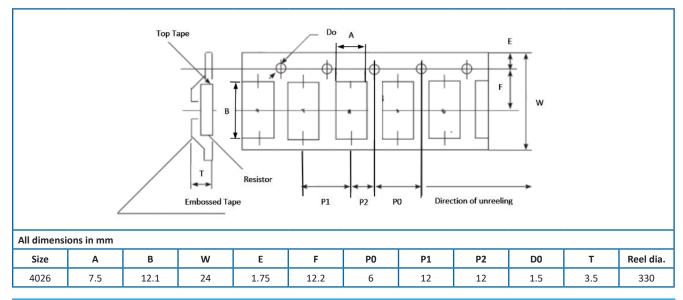
(0.5% Stability)



### **Typical Temperature Characteristic**



## **Packaging**



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## **Ordering Procedure**

Example: LRMAP4026B-1L0FT1 (1 milliohm ±1%, Pb-free)



1	2	3	4	5	
Туре	Alloy	Value	Tolerance	Packing	
LRMAP4026	В	3 characters	F = ±1%	T1 = plastic tape, 1000/reel	
	С	L = milliohms			