

BFL-Series Precision Chip Shunt Resistors

Sizes: 3W, 5W

Features:

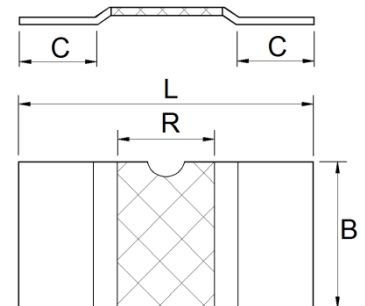
- Metal strip chip shunts
- Welded structure
- High continuous operating current up to 100A
- Low inductance (< 3nH)
- Non-magnetic



Dimensions:

Size	L	B	R	C
3 W	10.50 ^{+0.5/-0}	5.2 ^{+0.3/-0.2}	5 ^{±0.2}	2 ^{+0/-0.2}
5 W	15.2 ^{±0.3}	7.5 ^{+0.3/-0.2}	5 ^{±0.2}	4 ^{±0.5}

L = Length, B = Width, C = Width of solder terminal (in mm)



Packaging:

Bulk in plastic bags – minimum quantity 100 pieces per value
Embossed carrier tape acc. to IEC 60286-3 – min. 1000 pcs. per value
Reel diameter 180 mm or 330 mm

Values:

Value \ Size	3W			5W		
	Tolerances	TCR ¹⁾²⁾	Alloy	5W	TCR ¹⁾²⁾	Alloy
0.5 mΩ	5% 10%	100	CuNiMn ¹⁾	5% 10%	100	CuNiMn ¹⁾
1 mΩ	5% 10%	100	CuNiMn ¹⁾	5% 10%	100	NiCrAlCu ²⁾
2 mΩ	5% 10%	100	NiCrAlCu ²⁾	5% 10%	100	NiCrAlCu ²⁾
3 mΩ	5% 10%	100	NiCrAlCu ²⁾	-	-	-

Ordering Data:

Type – value – tolerance

Example: BFL 5W 1mR ±5%

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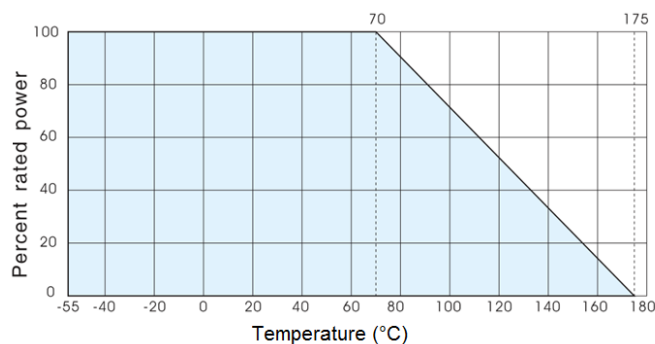
Technical data – general:

Operating temperature range	-55°C ... +175°C
Climatic category acc. to EN 60068-1	55/175/56
Solderability acc. to EN 60068-2-58 (lead-free and lead-containing) ³⁾	260°C, 3s
Max. soldering temperature acc. to EN 60068-2-58	350°C, 3s

³⁾ Storage conditions: 0...35°C; ≤ 75% rH

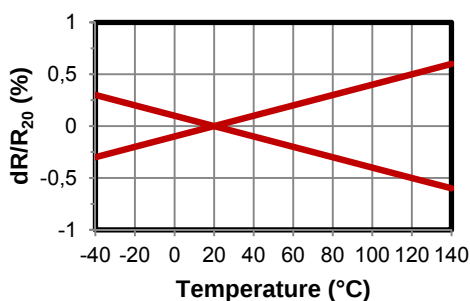
Long term stability	Specification	dR/R
Load Life	70°C / 2000h / 1.5h on + 0.5h off	< 0.5%
Storage	140°C/250h	< 0.2%
Overload	5x rated power for 5s	< 0.2%
Resistance to solder heat	3s @ 350°C	< 0.2%
Thermal shock	25x -65°C...+125°C	< 0.1%

Derating



Temperature dependence of the used materials

¹⁾ CuNiMn



²⁾ NiCrAlCu

