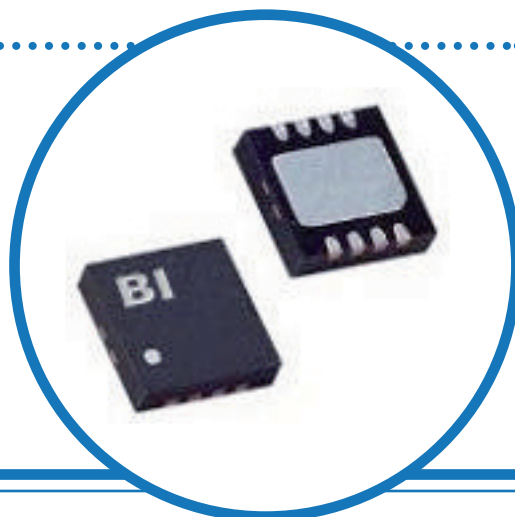


Nichrome Resistor Networks on Silicon Substrates

SFN08A, SFN08B Series

Isolated and bussed circuits
Thin film resistor network
RoHS compliant

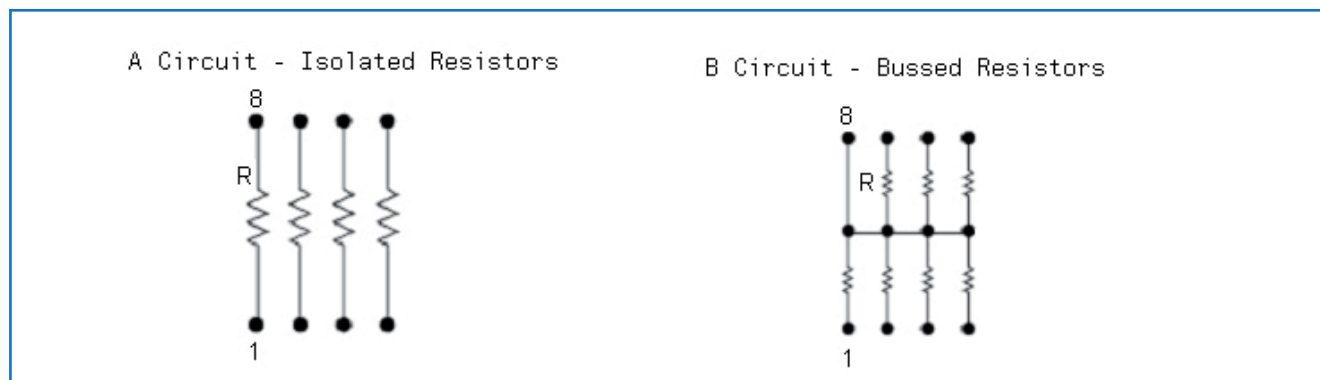
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Features

Precision Nichrome Resistors on Silicon	Passivation coating provides protection in humid environments
Industry Standard Packaging	8 pad SON ¹ 4mm square with 0.8 mm pitch (JEDEC MO-229D)
Ratio Tolerances	< ± 0.05%
TCR Tracking Tolerances	< ± 5 ppm/°C

Schematics



Electrical²

Standard Resistance Range ³	1K ohms to 100K ohms (Isolated) 1K ohms to 30K ohms (Bussed)
Resistor Tolerances	± 0.25%
Ratio Tolerances	± 0.05%
TCR	Reference TCR table
Operating Temperature Range	-55°C to +125°C
Interlead Capacitance	< 2 pF
Insulation Resistance	≥ 10,000 Megohms
Maximum Operating Voltage	100 Vdc or √ PR
Noise, Maximum (Mil-STD-202, Method 308)	-25 dB
Resistor Power Rating at 70°C	0.1 Watts

1 Small outline no lead (SON) package is also referred to as quad flat no lead (QFN) or dual flat no lead (DFN) packages.

2 Specifications subject to change without notice.

3 E96 codes available.

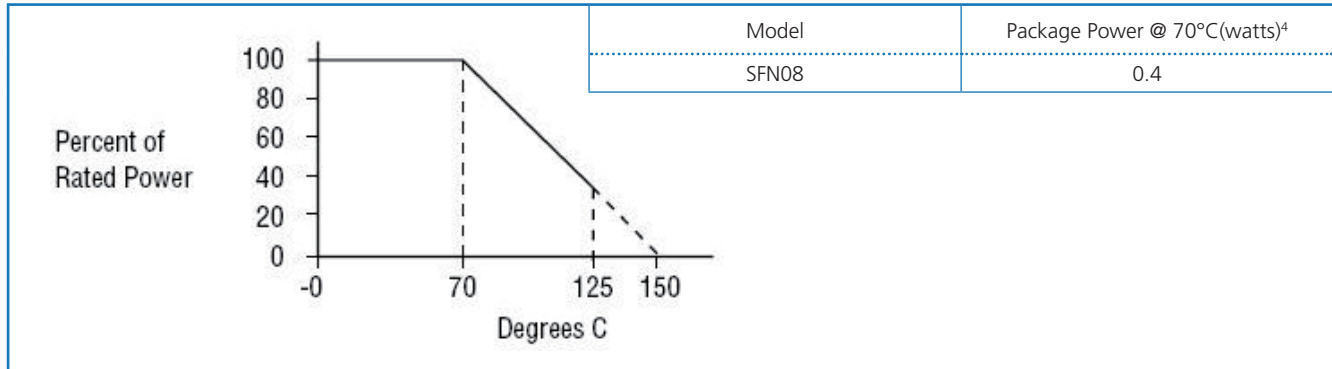
General Note

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www.bitechnologies.com www.irctt.com www.welwyn-tt.com

Package Power And Derating Curve



Environmental (MIL-R-83401)

Thermal Shock plus Power Conditioning	ΔR 0.25%
Short Time Overload	ΔR 0.1%
Terminal Strength	ΔR 0.1%
Moisture Resistance	ΔR 0.2%
Mechanical Shock	ΔR 0.25%
Vibration	ΔR 0.25%
Low Temperature Operation	ΔR 0.05%
High Temperature Exposure	ΔR 0.1%
Resistance to Solder Heat	ΔR 0.1%
Marking Permanency	Per MIL-STD-202, Method 215
Flammability	UL-94V-0 Rated
Storage Temperature Range	-55°C to +125°C

Mechanical

Pad Plating	100 matte Tin (RoHS compliant)
Pad Material	Copper Alloy
Pad Coplanarity	0.003" (0.08 mm)
Substrate Material	Silicon
Resistor Material	Passivated Nichrome
Body Material	Molded Epoxy

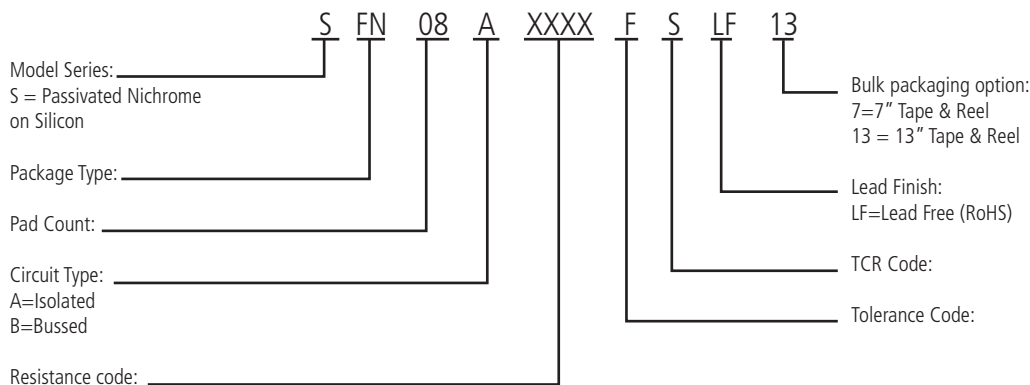
⁴ Maximum power per resistor @ 70C is 100 mW, not to exceed package power

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Ordering Information⁵



Package Type

SON	Package Codes	Package Size	Pad count	Mechanical Outline
	FN	4mm x 4mm	8	MO-229D

Resistance

First 3 digits are significant. Fourth digit denotes number of trailing zeros. For values less than 100, use "R" to denote a decimal point. Example, 51 and 10000 ohms are coded as 51R0 and 1002 respectively. Standard values follow E96.

Resistance Tolerance

Accuracy Code at 25°C	CA	CB	D	FA	F	G	J
Absolute Resistance Tolerances (%)	± 0.25	± 0.25	± 0.5	± 1.0	± 1.0	± 2.0	± 5.0
Ratio Tolerances (R1 Ref) (%)	± 0.05	± 0.1	± 0.1	± 0.05	± 1.0	N/A	N/A

Temperature Coefficient Of Resistance (TCR)

TCR Code (-55°C to 125°C)	Q	P	S	L
Absolute (ppm/°C)	± 25	± 50	± 100	± 200
Tracking (R1 Ref) (ppm/°C)	± 5	± 5	N/A	N/A

Bulk Packaging Options

Model + Pad Count	Quantity	
	7" Reel	13" Reel
SFN08	1000	3000

⁵ Contact customer service for custom designs and features.

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