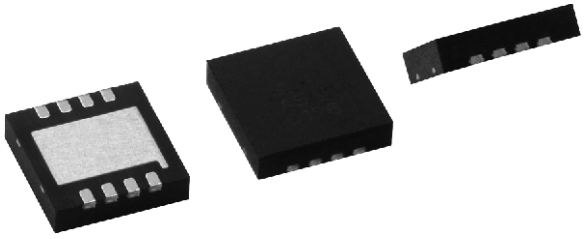
Dual Flat No Lead Molded Precision Thin Film Divider, Surface Mount Resistor Network



The DFN series of thin film precision dividers surface mount resistor networks offer a wide ratio range that is listed in the standard resistance offering table. The 4 mm x 4 mm 0.8 mm pitch dual flat no lead package feature 50 % savings in board space over traditional SOIC packages. The DFN dividers are ideal for applications that require tight TC tracking and ratio tolerances over temperature.

FEATURES

- 0.8 mm lead pitch
- MSL level 1 per J-STD-020
- Low profile 1 mm seated height
- Small size 4 mm x 4 mm size 50 % board savings over SOIC packages
- Low TCR ± 25 ppm, TCR tracking to ± 5 ppm
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

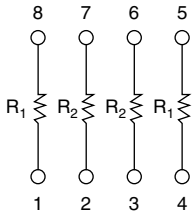
Pb-free

RoHS COMPLIANT

TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.05

SCHEMATIC



STANDARD RESISTANCE OFFERING (R_1/R_2)		
RATIO	R_1	R_2
100:1	100K	1K
50:1	50K	1K
25:1	25K	1K
20:1	20K	1K
10:1	10K	1K
5:1	10K	2K
2:1	10K	5K

STANDARD ELECTRICAL SPECIFICATIONS		
TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	8	-
Resistance Range	1000 Ω to 100 kΩ per element	-
TCR: Absolute	± 25 ppm/°C	-55 °C to +125 °C
TCR: Tracking	± 5 ppm/°C	-55 °C to +125 °C
Tolerance: Absolute	± 0.1 %	+25 °C
Tolerance: Ratio	± 0.05 %	+25 °C
Power Rating: Resistor	100 mW	Maximum at +70 °C
Power Rating: Package	100 mW x number of resistors	Maximum at +70 °C
Stability: Absolute	ΔR ± 0.05 %	2000 h at +70 °C
Stability: Ratio	ΔR ± 0.015 %	2000 h at +70 °C
Voltage Coefficient	< 0.1 ppm/V	-
Working Voltage	100 V max. not to exceed $\sqrt{P \times R}$	-
Operating Temperature Range	-55 °C to +125 °C	-
Storage Temperature Range	-55 °C to +150 °C	-
Noise	< - 30 dB	-
Thermal EMF	< 0.08 µV/°C	-
Shelf Life Stability: Absolute	ΔR ± 0.01 %	1 year at + 25 °C
Shelf Life Stability: Ratio	ΔR ± 0.002 %	1 year at + 25 °C

For technical questions, contact: thinfilm@vishay.com

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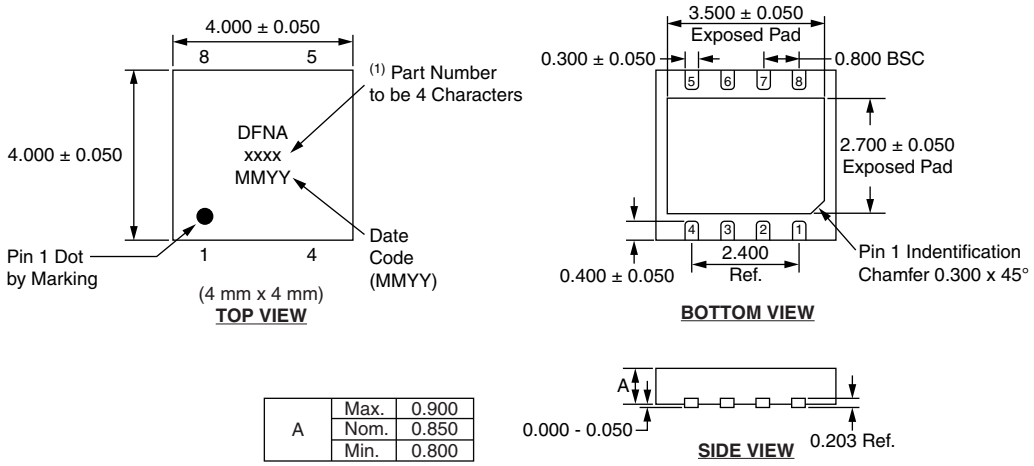
DIMENSIONS AND IMPRINTING in millimeters



A	Max.	0.900
	Nom.	0.850
	Min.	0.800

Notes

(1) 100-1 resistance ratio part marking to be 100-

(2) Contact factory for package outlines for higher pin count or custom configurations

MECHANICAL SPECIFICATIONS

Resistive Element	Passivated nichrome
Substrate Material	Ceramic
Body	Molded epoxy
Terminals	Copper alloy
Plating	100 % matte tin
Marking Resistance to Solvents	Per MIL-PRF-914

GLOBAL PART NUMBER INFORMATION

D	F	N	A	5	-	1	U	F

GLOBAL MODEL (4 digits)	RESISTANCE (3, 4 or 5 digits)	PACKAGING
DFNA (Lead (Pb)-free) (e3)	**2-1** **5-1** **10-1** **20-1** **25-1** **50-1** **100-1**	TAPE AND REEL **T0** = 100 min., 100 mult **T1** = 1000 min., 1000 mult (3) **T3** = 300 min., 300 mult **T5** = 500 min., 500 mult **TF** = Full reel 3000 **TS** = 100 min., 1 mult **UF** = TUBED

Note

(3) Preferred packaging code

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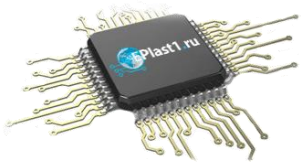
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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