

AV-0805



Features

Thin film technology

Full Wraparound

Temperature variable - 8 different temperature characteristics

Attenuation from 1 dB to 10 dB in 1 dB increments

VSWR 1.3:1 max.

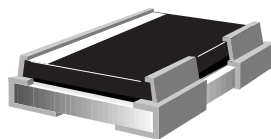
ims International Manufacturing Services, Inc.
50 Schoolhouse Lane
Portsmouth, RI 02871
Tel (401) 683-9700
Fax (401) 683-5571
e-mail: ims@ims-resistors.com
<http://www.ims-resistors.com>

Thin Film Surface Mount Temperature Variable Chip Attenuator

The *ims* AV-0805 thin film surface mount temperature variable chip attenuator is ideal for applications requiring precision attenuation with integrated temperature compensation in a small form factor package. The attenuator is provided in the "π" configuration. Thin film technology insures a low noise, precise attenuator at a very affordable price. Eight different temperature characteristics are available. The wraparound terminations include a nickel barrier layer which affords excellent solderability and mechanical integrity. This chip attenuator has the following features:

- Precision thin film attenuator element
- 99.5% Al₂O₃ substrate material
- Nickel barrier layer for excellent solderability and mechanical integrity
- Ultra low noise attenuator element
- Usable up to 3 GHz
- Eight different temperature characteristics
- Stable characteristics over temperature and time
- Polyimide passivation of attenuator element
- Available in bulk or on tape and reel

Terminations



Full wraparound termination

Solder plated nickel barrier

Attenuation Ranges

The AV-0805 is available in values from 1dB to 10 dB in 1 dB increments. Each attenuation value is available in 8 different temperature characteristics - N1 to N8.

Temperature Characteristics

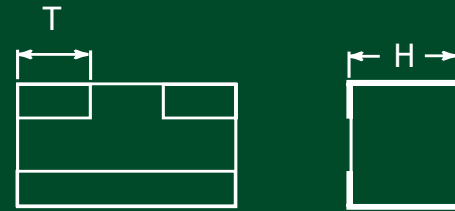
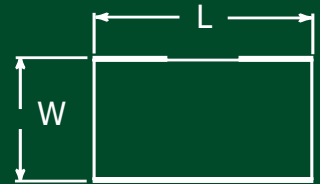
Nominal change in attenuation values (dB) from -15°C to +75°C

Attenuation	N1	N2	N3	N4	N5	N6	N7	N8
1dB	-0.24	-0.19	-0.15	-0.12	-0.08	-0.07	-0.06	-0.04
2dB	-0.88	-0.68	-0.56	-0.43	-0.31	-0.26	-0.21	-0.15
3dB	-1.94	-1.48	-1.21	-0.93	-0.67	-0.57	-0.47	-0.33
4dB	-3.63	-2.62	-2.11	-1.61	-1.16	-0.99	-0.81	-0.58
5dB	-4.24	-3.32	-2.48	-1.77	-1.51	-1.25	-0.89	-0.62
6dB	-6.68	-4.93	-3.57	-2.52	-2.15	-1.78	-1.28	-0.89
7dB	-7.20	-4.95	-3.42	-2.92	-2.41	-1.73	-1.21	-0.88
8dB	-6.71	-4.50	-3.81	-3.13	-2.25	-1.58	-1.15	-0.82
9dB	-5.78	-4.86	-3.98	-2.86	-2.01	-1.47	-1.05	-0.77
10dB	-7.34	-6.10	-4.95	-3.54	-2.49	-1.83	-1.31	-0.92

- Notes: 1. Temperature characteristics are not linear.
2. Specification is subject to change without notice.

Dimensions

Part Number	Length	Width	Height	Terminal
AV-0805	0.079 ± .008	0.049 ± .008	0.020 max.	0.024 ± .010



Characteristics

Operating Temperature	-40°C to +100°C
Impedance	50 Ω
Frequency range	DC to 3 GHz
VSWR	1.3:1 maximum
Attenuation	0; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10 dB
Attenuation tolerance	± 0.5 dB
Temperature characteristic	N1, N2, N3, N4, N5, N6, N7, N8

Specifications

Maximum Working Voltage	2.24 V
Rated power (70°C)	100 mW

Ordering Information

Example: 3 dB, N1 temperature characteristic, 100 mW, surface mount 0805 attenuator.

AV	-0805	- C	-03DBN1
Attenuator (Temperature Variable)			Attenuation level 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, or 10 dB
Form factor 0805			Temperature characteristic N1, N2, N3, N4, N5, N6, N7, N8
			Impedance 50Ω

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ims International
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Services, Inc.

50 Schoolhouse Lane
Portsmouth, RI 02871
Tel (401) 683-9700
Fax (401) 683-5571
e-mail: ims@ims-resistors.com
<http://www.ims-resistors.com>