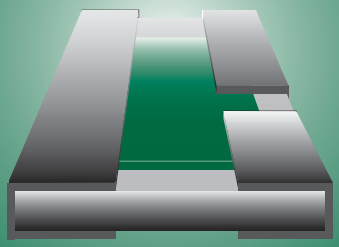
A-Series



Features

Thin film technology

Full Wraparound

Nickel Barrier for excellent solderability

Attenuation from 0 dB to 10 dB in 1 dB increments, 16 dB (A-1206, A-1612), 20 dB (A-1612)

VSWR 1.5:1 max. (A-0402),1.3:1 all others

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 Chip Attenuators

The ***ims*** A-Series thin film surface mount chip attenuator line is ideal for applications requiring precision attenuation in a small form factor packages. The attenuators are provided in the "π" configuration. Thin film technology insures a low noise, precise attenuator at a very affordable price. The wraparound terminations include a nickel barrier layer which affords excellent solderability and mechanical integrity. This chip attenuator line has the following features:

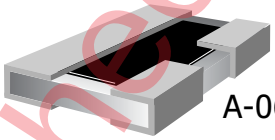
- Precision thin film attenuator element
- 99.5% Al_2O_3 substrate material
- Nickel barrier layer for excellent solderability and mechanical integrity
- Ultra low noise attenuator element
- Excellent high frequency performance
- Low inductance and parasitic capacitance
- Stable characteristics over temperature and time
- Polyimide passivation of attenuator element
- Available in bulk or on tape and reel

RoHS COMPLIANT

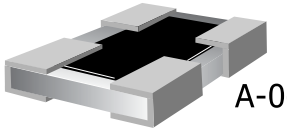
100% Matte Tin Finish

Terminations

Full wraparound



A-0603,0805,1206,1612

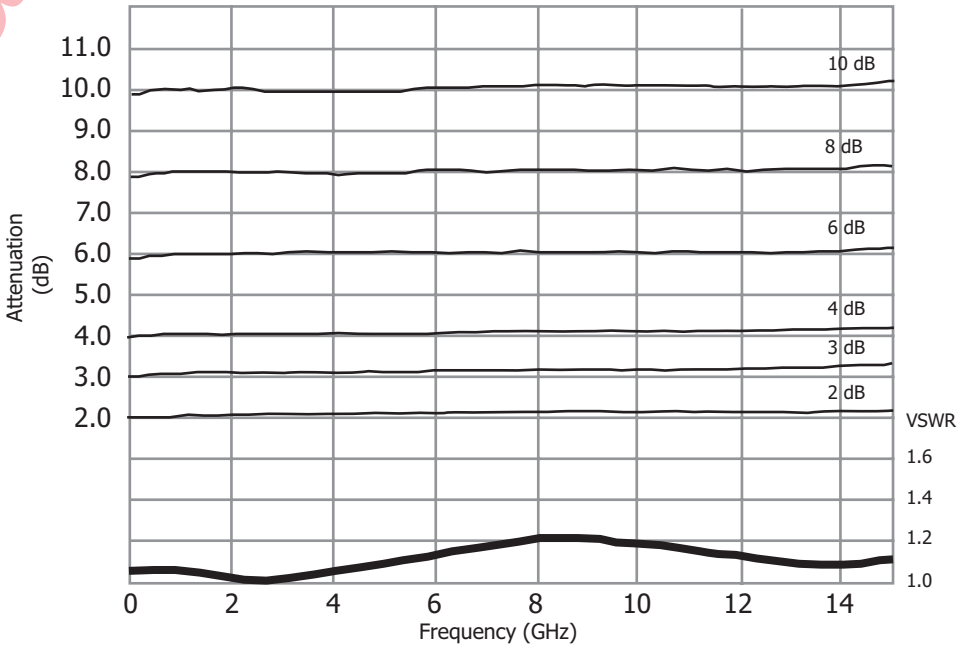


A-0402WA

Attenuation Ranges

The A-Series is available in values from 0dB to 10 dB in 1 dB increments. Standard impedance is 50Ω.

Frequency Characteristics (A-0805)*

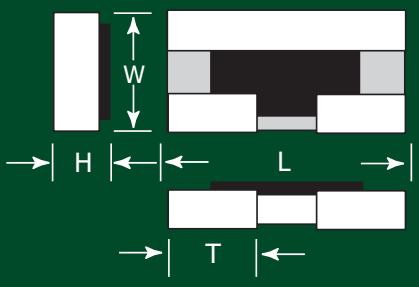


*Performs within spec to 20 GHz when mounted face down.

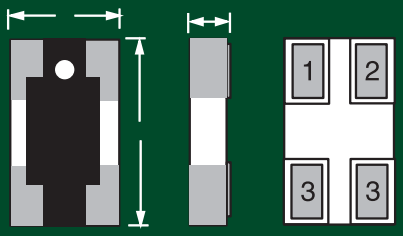
www.datasheet.ru

Dimensions

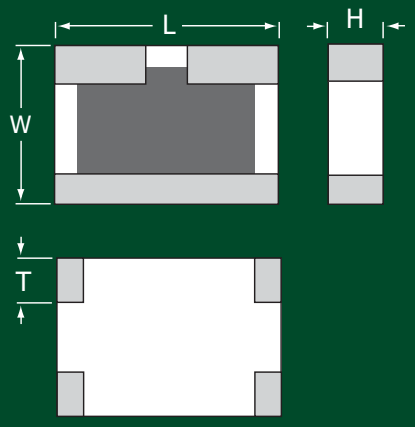
Part Number	Length	Width	Height	Terminal
A-0402WA	0.039 ± .004	0.020 ± .004	0.014 max.	0.009 ± .002
A-0603 & IMS2533	0.063 ± .004	0.032 ± .004	0.020 max.	0.016 ± .006
A-0805 & IMS1141	0.079 ± .008	0.049 ± .008	0.020 max.	0.020 ± .008
A-1206	0.126 ± .008	0.063 ± .008	0.020 max.	0.039 ± .010
A-1612	0.165 ± .008	0.118 ± .008	0.020 max.	0.037 ± .008



A-0603, A-0805, A-1206



A-0402WA



A-1612

Characteristics

Operating Temperature	-55°C to +125°C
Impedance	50 Ω
Frequency range	DC to beyond 10 GHz (A-0402WA, A-0603, A-0805) DC to 3 GHz (A-1206) DC to 2 GHZ (A-1612)
VSWR	1.3:1 maximum (except A-0402WA - 1.5:1)
Attenuation	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 16*, 20** dB
Attenuation tolerance	
A-0805, 1141, A-1206, A-1612	± 0.3 dB, ± 0.5 dB (1206 - 16 dB, 1612 - 16 dB,20dB)
A-0402WA, A-0603, 2533	± 0.3 dB (0 - 3dB) ± 0.5 dB (4 - 7 dB) ± 1.0 dB (8 - 10 dB)

* A-1206, A-1612 only **A-1612 only

Specifications

Maximum Working Voltage	
A-0402WA	1.26WVDC
A-0603 & IMS2533	1.77WVDC
A-0805 & IMS1141	2.24WVDC
A-1206	2.50WVDC
A-1612	3.53WVDC
Rated Power (70°C)	
A-0402WA	32mW
A-0603 & IMS2533	63mW
A-0805 & IMS1141	100mW
A-1206	125mW
A-1612	250mW

Ordering Information

Face Up Example: 3 dB, 100 mW, SMT 0805 attenuator.

A	**-0805**	**- C**	**-03DB**
Prefix for Face Up Attenuator	Form factor 0402WA, 0603, 0805, 1206, 1612	C indicates 50Ω impedance	Attenuation level 00 - 10 dB, 16*, 20**dB *A-1206 & 1612 only ** A-1612 only

Face Down Example: 3 dB, 100 mW, SMT 0805 attenuator.

IMS1141	**- 03DB**
IMS2533 = Face Down 0603 IMS1141 = Face Down 0805	Attenuation level 00 - 10 dB

For higher dB values, higher power ratings or lead content attenuators see our IAX Series

Ask Us About Engineering Kits!

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