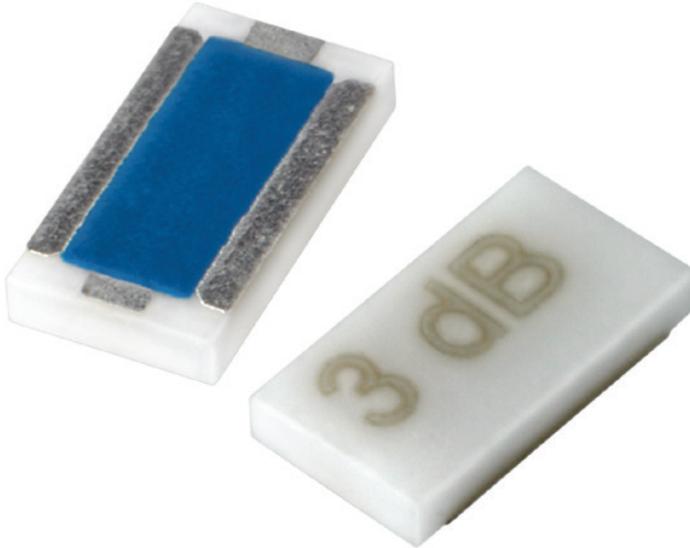


KFA Series

ATTENUATOR CHIP 200 MILLIWATTS



Smiths Interconnect is the world leader in chip attenuators offering the widest selection of products from DC through K band. Chip components are offered on Alumina, Aluminum Nitride, Beryllium Oxide, and CVD Diamond for a wide range of applications. Backed by proven performance and significant heritage, Smiths Interconnect is the leader in high reliability components.

The KFA platforms offer significant heritage and proven performance in a cost effective commercial grade product. High reliability tested options are also available to ensure mission success in demanding high reliability applications. Multiple band options are available between 16-36 GHz with excellent response to support a wide range of applications. The products are constructed on an Alumina substrate with rugged thick film terminations and passivated Tantalum Nitride resistive elements. The product also includes a protective coating for added protection from various environmental conditions. Multiple attenuation values and mounting configuration are available to support both surface mount and wire bond applications. Various finish options are also available including RoHS compliance.

KFA Series Chip Attenuators offer proven performance and significant high reliability heritage in a commercial grade product.

Features and Benefits

- Small footprint
- Multiple mounting configurations
- Various band options available
- Low VSWR
- Wide range of attenuation values
- Tight attenuation tolerance
- High reliability options available

Applications

- Amplifier circuits
- Transmit/receive modules
- Up/Down converters
- Instrumentation
- Satellite communications
- Radar
- Broadcast

Technical Characteristics

Mounting Configuration Options	KFA Wire Bondable	KFA Surface Mount
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Electrical

Nominal Impedance	50 ohms	
Frequency Range	-5 (16-36 GHz)	-5 (18-27 GHz) -6 (27-36 GHz)
Attenuation Values Available	0-10 in 1 dB Increments	
Attenuation Accuracy	± 0.75 dB	
Input Power CW	200 Milliwatts Max up to 100°C (See derating curve)	
Peak Power	2 Watts based on 10 µS pulse width @ 1% Duty Cycle	
VSWR	1.35:1 Typical	1.35:1 Typical 1.50:1 Maximum

Environmental

Operating Temperature	-55°C to +150°C
Storage Temperature	-65°C to +150°C
Moisture Sensitivity Level	MSL 1 - Unlimited

Mechanical

Substrate Material	Alumina (Al ₂ O ₃) 96%	
Resistive Film	Thick Film	Thin Film, Tantalum Nitride
Terminal Material	Thick Film Bondable Gold	Thick Film
Ground Plane Material	Thick Film Solderable Gold	N/A
Protective Coating	Polymer	
Finish Options	Blank	Solder Plated (Sn60/Pb40)
	-F	Silver Plated (RoHS Compliant)

Marking

Unit Marking	dB Value
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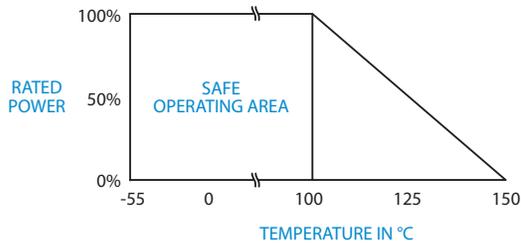
Quality Assurance

	Sample visual and mechanical inspection - 1.0 AQL per mechanical drawing requirements
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Packaging

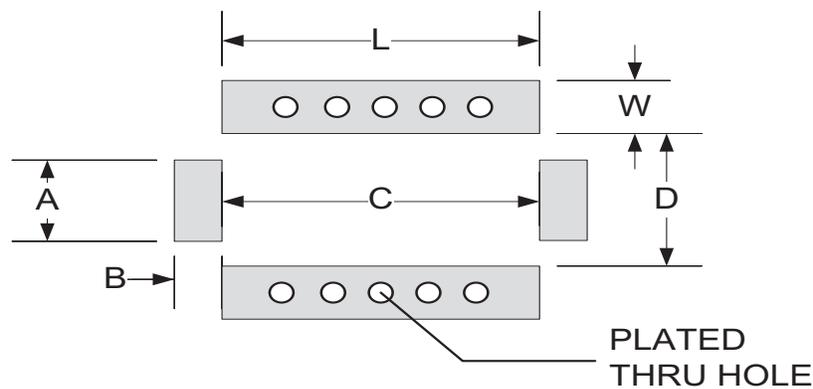
Standard Packaging	Tape and Reel or Waffle Pack
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Power Derating Curve



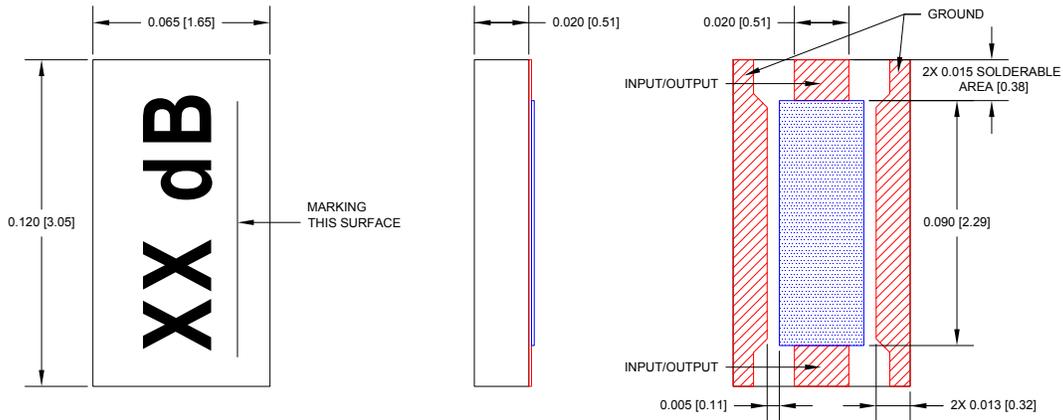
Suggested Mounting Footprint

Part Number	Inches						Millimeters					
	A	B	C	D	L	W	A	B	C	D	L	W
KFAXX.00-XSMTF	0.023	0.013	0.095	0.040	0.095	0.025	0.58	0.33	2.41	1.02	2.41	0.64

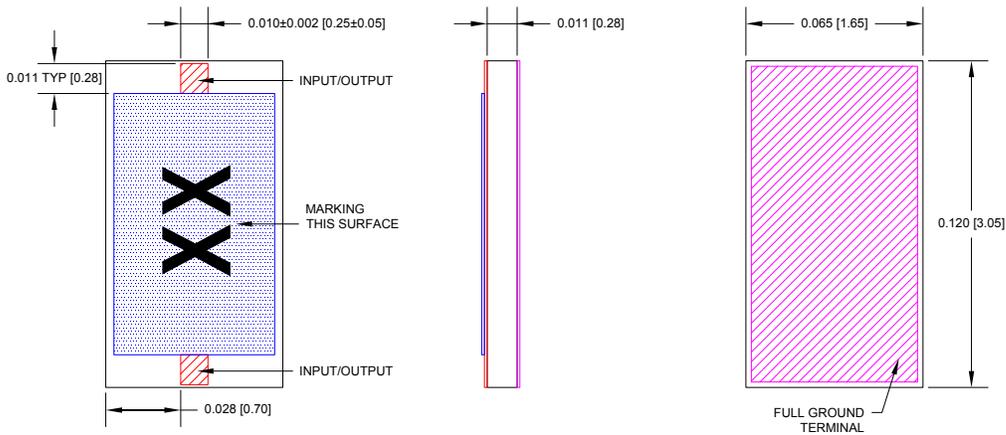


Mechanical

KFA Surface Mount



KFA Wire Bondable



How To Order

Specify Model Number: **KFAXX.00-XSMTX**

	<input type="checkbox"/> K <input type="checkbox"/> F <input type="checkbox"/> A	<input type="checkbox"/> <input type="checkbox"/> . <input type="checkbox"/> 0 <input type="checkbox"/> 0	<input type="checkbox"/> - <input type="checkbox"/>	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> T	<input type="checkbox"/>
	1	2	3	4	5
1 Series Name	<input type="checkbox"/> K <input type="checkbox"/> F <input type="checkbox"/> A KFA Series				
2 Attenuation Value	<input type="checkbox"/> 0 <input type="checkbox"/> 0 00.00 dB through <input type="checkbox"/> 1 <input type="checkbox"/> 0 10.00 dB				
3 Frequency Range	<input type="checkbox"/> - <input type="checkbox"/> 4 -4 <input type="checkbox"/> - <input type="checkbox"/> 5 -5 <input type="checkbox"/> - <input type="checkbox"/> 6 -6				
4 Options	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> T Surface Mount				
5 Terminal Finish	<input type="checkbox"/> Standard <input type="checkbox"/> F RoHS				

Worldwide Support

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Technical Support

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