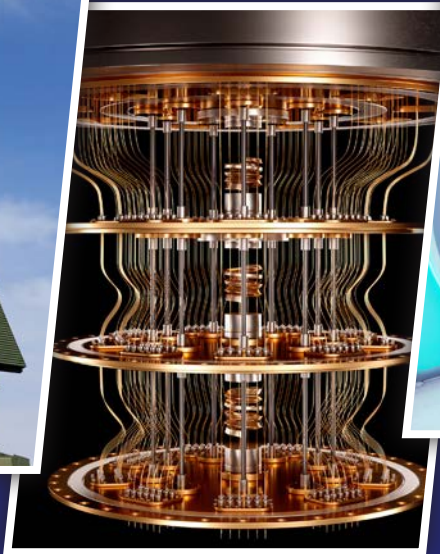


POWERFILM™

apitech



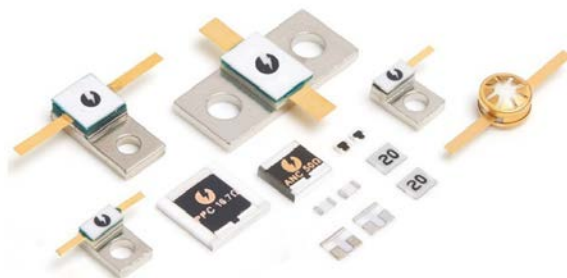
Powerfilm™ Surface Mount Resistive Products



Powerfilm™ Surface Mount Resistive Products

Resistors, Terminations, and Attenuators

- Up to 40GHz for High-frequency
- Up to 1250W for High Power
- Selectable Finishes and Packaging Options



The Powerfilm™ team is ready to help you with product selection, engineering and application support, product testing including MIL-spec qualification, and on-time delivery, all from our US based facility.

Industries and Applications

APItech's Powerfilm™ resistive products are used in dozens of different applications, and this list continues to grow longer. Contact us to help you find the best Powerfilm™ product for your application!

Military and Government



- Integrated Microwave Assemblies
- E/W and T/R modules
- Phased-Array Radars

Space



- Satellite Communications including GPS III and NISAR-ISRO

Avionics and Transportation



- Traffic Collision Avoidance and Proximity Warning systems

Wireless Communications



- FM and TV Signal Transmitters
- High-Power Terminations for Isolators & Amplifiers

Medical



- Flanged Resistors for RF power and Plasma generation
- MRI Power Electronics

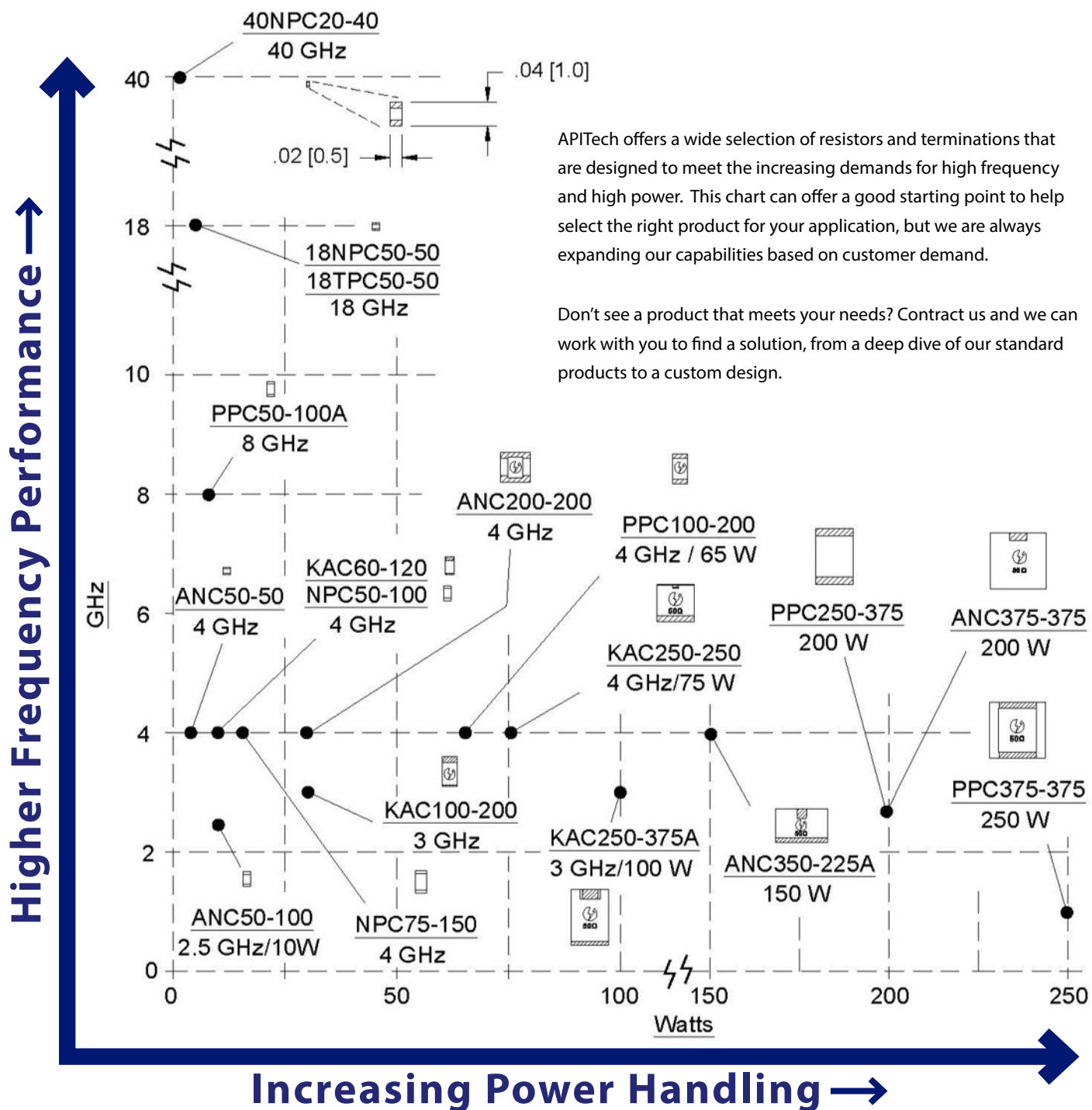
More...



- Test and Measurement
- Cryogenic Computing



Chip Resistor and Termination Selection Guide





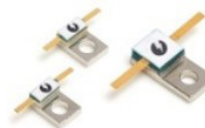
Chip Attenuator Selection Guide

Don't see a product that meets your needs? Contract us and we can work with you to find a solution, from a deep dive of our standard products to a custom design.

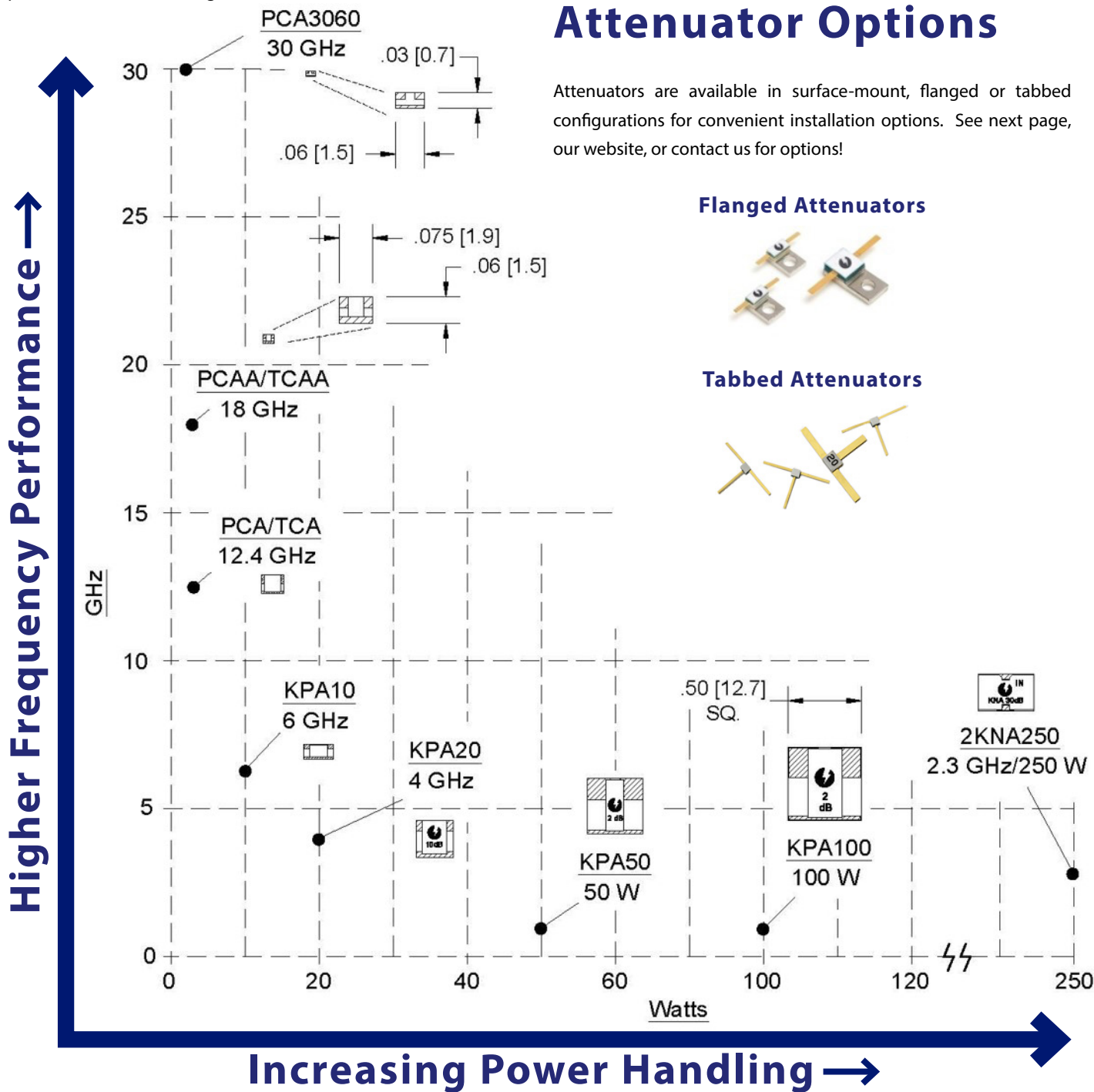
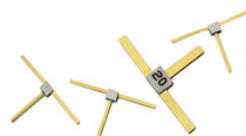
Attenuator Options

Attenuators are available in surface-mount, flanged or tabbed configurations for convenient installation options. See next page, our website, or contact us for options!

Flanged Attenuators



Tabbed Attenuators

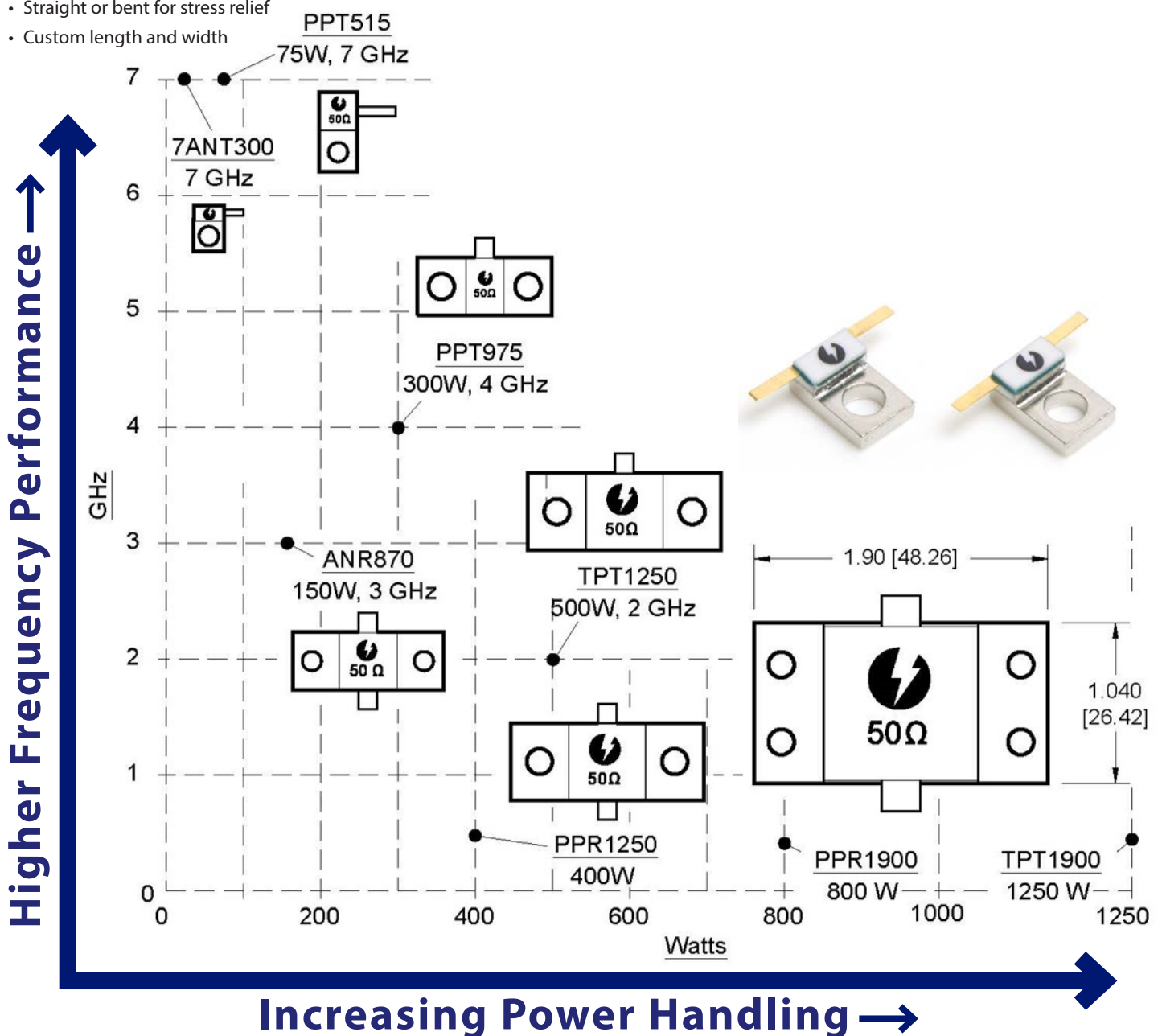




Flange Termination and Resistor Guide

Tab Options

- Gold plated Beryllium Copper
- Silver
- Straight or bent for stress relief
- Custom length and width

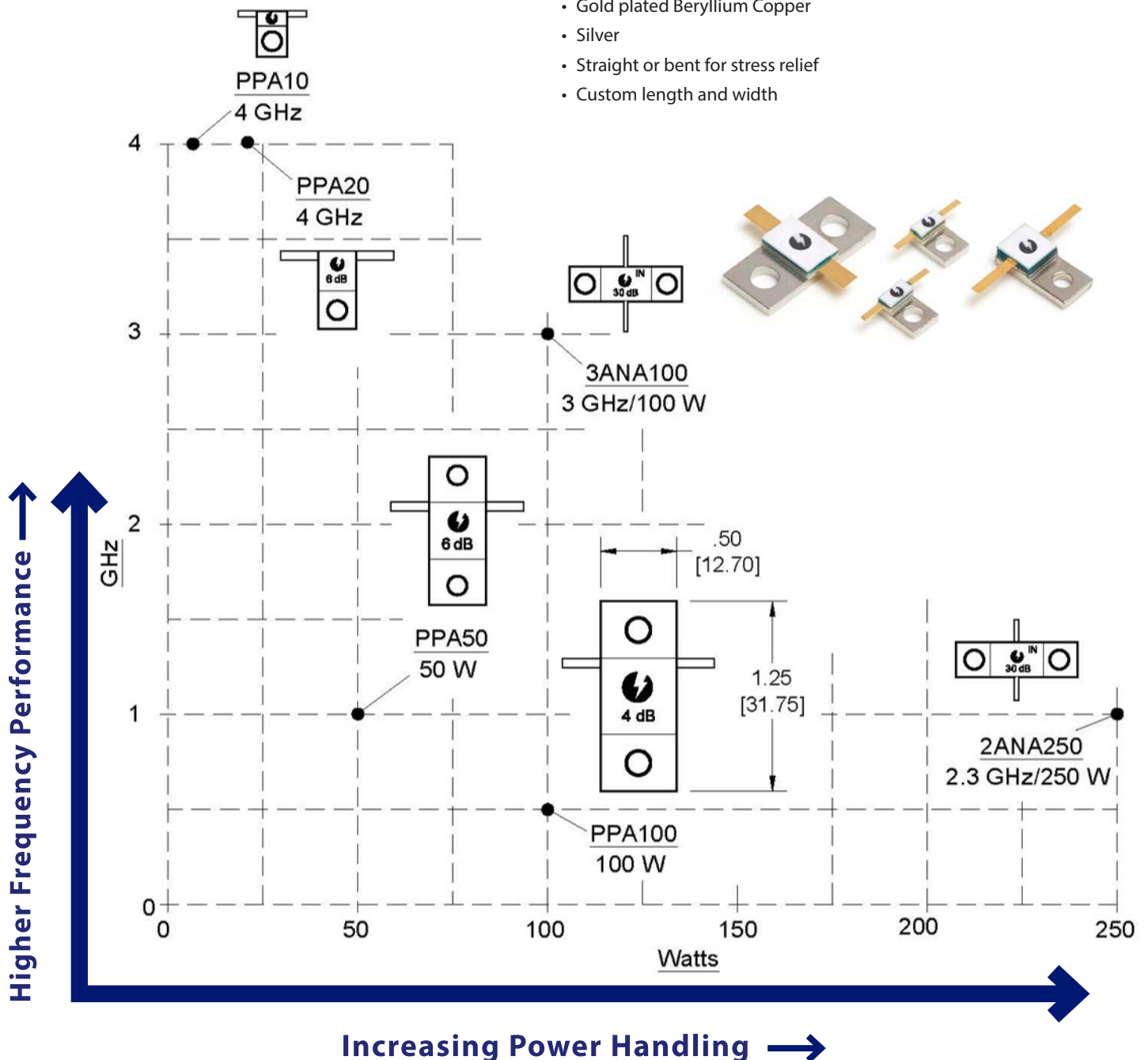




Flange Attenuator Selection Guide

Tab Options

- Gold plated Beryllium Copper
- Silver
- Straight or bent for stress relief
- Custom length and width





Substrate Options

API Tech Powerfilm™ products are available in a variety of substrates.

BeO: BeO (Beryllium Oxide) offers a high thermal conductivity to enable best performing products.

AlN: AlN (Aluminum Nitride) offers a balance of thermal performance and cost – best value power products.

Alumina: Offers best value and performance for high-frequency applications with lower power requirements.



Terminal Options

Silver over Nickel: Best value

Gold: Best for Wire-bonding

Tinned with Lead-free solder: Best solderability

Tinned with Tin-Lead solder: RoHS compliant solder

Pills

API tech also offers pill terminations for high frequency and high powers.

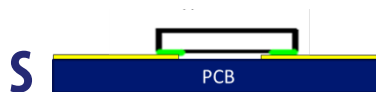
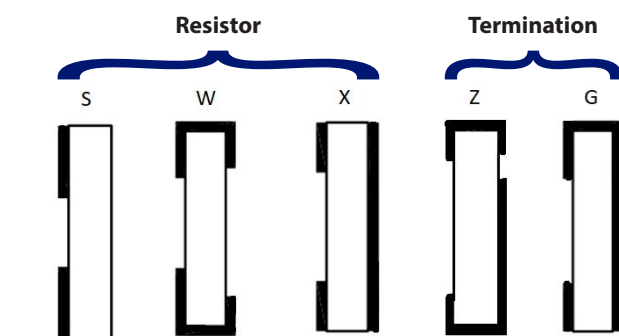
Rods

API tech also offers rod resistors in various sizes for both high frequency and high power.

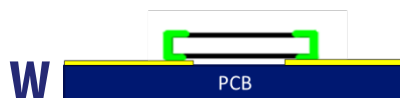


Contact us or visit our website for more details.

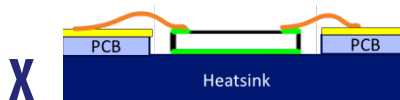
Resistor and Termination Wrap Styles



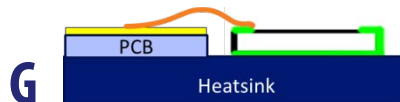
- Best RF performance
- Lowest cost



- Improved soldering
- Resistor can face up or down



- Best power handling, with full backplane to transfer heat



- Best power handling, with full backplane to transfer heat



- Combines ease of installation with high power performance



Who We Are

Value-added Integration from Components to Subsystem Solutions

APItech provides rugged, reliable, and efficient subsystems, assemblies, and components for use in the most mission critical defense and military applications, supporting government programs throughout the world. With diverse program experience and preferred supplier status with some of the industry's top premier contractors, our precision-engineered MIL-grade products are ideal for applications where uncompromised reliability and uninterrupted performance is required. APItech is the Electromagnetic Spectrum Innovator at Tier 2.5-4 in the supply chain.

SYSTEMS INTEGRATION
SYSTEM PRIME



F-35

MISSION/INTEGRATED SYSTEMS
TIER 1



Radar or
Communications

INTEGRATED SUBSYSTEMS & BOXES
TIER 2



Radio or Interface
Assembly

MODULES
TIER 3



IMAS

COMPONENTS
TIER 4



Passive
COAX

The Electromagnetic Spectrum Innovator

APItech is an innovative designer and manufacturer of high performance systems, subsystems, assemblies and components for technically demanding RF, microwave, millimeterwave, electromagnetic, power, and security applications. A high reliability technology pioneer with over 70 years of heritage, APItech's products are used by global defense, industrial, and commercial customers in applications spanning radar, electronic warfare, unmanned systems, missile defense, harsh environments, space, communications, medical, test and instrumentation, and more.



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CONTACT US