



UK specialist in RF & Microwave Components, Sub-Systems & Test Solutions

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NEW PRODUCT NEWS - DECEMBER 2020

In this December 2020 Issue:

- **Boonton Electronics** - Melcom Appointed by Boonton who manufacture a comprehensive portfolio of Power Sensors/Meters, Audio and Modulation Analysers
- **Wolfspeed** - New parts in S & X Band
- **Southwest Microwave** - Application note on Radial & Axial Misalignment of Miniaturised Connectors
- **Tennmax USA** - RF Absorber Technology
- **Altum RF** - New Wideband Amplifiers 2-20 GHz



Boonton

Melcom Appointed UK & Ireland Sales Representative

Boonton Electronics is a leader in high performance RF and Microwave Test equipment for Radar, Avionics, Electronic Warfare, Satellite and Wireless communications, and EMI/EMC applications.

Boonton products enable a wide range of RF power measurements and signal analysis for RF product design, production, maintenance and system integration. The Boonton product portfolio is designed and manufactured in the USA and includes:

- Peak and average RF Power Meters
- Real-Time USB Power Sensors
- RF Voltmeters
- Modulation Analysers
- Audio Analysers.



Boonton products provide the following key advantages:

- Fastest measurement speed and better time resolution
- Fastest rise times
- Cost competitive
- wide dynamic range



[Learn more about Boonton](#)

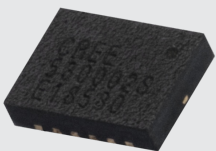
[Contact Melcom - for detailed specification, pricing & availability](#)



New Wolfspeed Products

New S & X Band Products

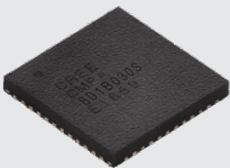
CMPA0530002S
2 W, 0.5-3.0 GHz, 28 V GaN MMIC Power Amplifier



- 18 dB Small Signal Gain
- 2.9 W Typical PSAT
- Operation up to 28 V
- High Breakdown Voltage
- High Temperature Operation
- Size 0.118 x 0.157 x 0.033 inches

[Datasheet](#)

CMPA801B030S
7.9 - 11.0 GHz, 40 W, Packaged GaN MMIC Power Amplifier



- Freq: 7.9 – 11.0 GHz
- Psat: 40 W
- PAE: 40%
- LS Gain: 20 dB
- 7x7 mm Overmold QFN
- Lower system costs
- Reduced board area

[Datasheet](#)

CMPA901A020S
(9.0 - 10.0 GHz, 20 W, Packaged
GaN MMIC Power Amplifier



- Freq: 9 – 10 GHz
- Psat > 20 W
- PAE > 45%
- LS Gain > 30 dB
- 6x6 mm Overmold QFN
- Lower system costs
- Reduced board area

[Datasheet](#)

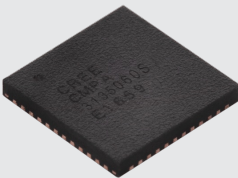
CMPA9396025S
(25 W, 9.3 - 9.6 GHz GaN MMIC Power
Amplifier)



- 9.3 - 9.6 GHz Operation
- 30 W Typical Output Power
- 27 dB Power Gain
- 50-ohm Matched for Ease of Use
- Plastic Surface-mount Package, 6 x 6 mm QFN

[Datasheet](#)

CMPA3135060S
(3.1 - 3.5 GHz, 60 W, Packaged GaN
MMIC Power Amplifier)



- 3.1 - 3.5 GHz Operation
- 75 W Typical Output Power
- 29 dB Power Gain
- 50-ohm Matched for Ease of Use
- Plastic Surface-Mount Package, 7x7 mm QFN

[Datasheet](#)

[Learn More About Wolfspeed](#)

[Contact Melcom - for detailed specification, pricing & availability](#)



SuperMini Board-to-Board Connectors - Radial Misalignment

Southwest's SSBB Board to Board technology has an inherent design capability to tolerate both Radial & Axial misalignments whilst still delivering excellent performance & Reliability



See the performance capabilities of the SuperMini **55070-001J Male Receptacle** and **54033-003B Female Bullet** with a radial misalignment of +/- 10° resulting in no resonance.

[Learn more about Southwest Microwave](#)

[Contact Melcom - for detailed specification, pricing & availability](#)



RF Absorber Material

Tennmax are able to supply housings/lids with integrated Form in Place EMI/ENV Gasket Thermal Interface materials & now also RF Absorber material

Supplying an integrated piece partly reduces build time and complexity for the customer.

MaxSorb

Microwave Absorber Material

TennVac

ESR / Tennant

Cavity Resonance Absorber Pad

CR-SS Series

Description

TennVac's Cavity Resonance (CR-SS series) Absorber product is a thin, flexible, non-conductive, magnetically filled, silicone rubber sheet stock which has high magnetic loss tangent from 1 GHz to 100 GHz. It can withstand wide temperature range, and survive outdoor exposure. It is applied to metal surface to attenuate RF surface currents, modify antenna patterns, or lower the Q of a cavity.

APPLICATIONS

> Attenuation of Cavity Resonance

> Attenuation of RF Surface Currents

> Signal Isolation

> Antenna Isolation

> System Isolation

> Reduction of Reflectivity and Backscattering

Benefits

> Durable outdoor exposure and wide working temperature range

> Flexible, can be cut and fitted to compound curves

> Wide suppression at broad frequency range

> Low outgassing

> RoHS compliant and halogen free

Properties

Property	CR-SS	CR-SS-025V-V
Thickness	mm	0.50, 0.75, 1.00
Adhesive Thickness	mm	0.05mm
Dielectric		2.00mm
Density	g/cm ³	1.35
Hardness	Shore A	5A
Operating Temperature	°C	-65 to 200
Flammability Rating		UL94
Part numbering		CR-SS-025V-V
CR-SS-025V-V		300 x 300mm (118" x 118")
CR-SS-025V-V		118" x 55"
CR-SS-025V-V		55" x 55"
CR-SS-025V-V		According to Customer Drawing
CR-SS-025V-V		1/2" x 1/2"

Technical Data Sheet

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Technical Data Sheet

Technical Data Sheet

Learn more about Tennmax

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ALTUM RF

Wide Band Products

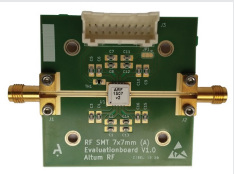
Distributed Amplifiers - Demo Boards Available

ARF1306C5
2-20 GHz, 17 dB Distributed Amplifier



- 2-20 GHz distributed amplifier
- 34.5 dBm output Psat
- 16 dB small-signal gain
- 10 dB large-signal gain
- 15 dB input return loss
- 15 dB output return loss
- 5 × 5 mm² surface-mount package

ARF1307C7
2 -20 GHz Distributed Amplifier



- 2-20 GHz distributed amplifier
- 10 W saturated output power
- 20 % PAE
- 17 dB small-signal gain
- 11 dB power gain
- 15 dB typical input return loss
- 12 dB typical output return loss
- Package size: 7 × 7 mm

Learn more about Altum RF

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