

## MONOLYTHIC AMPLIFIERS

### MINI-CIRCUITS MAR AMPLIFIERS



MAR



MAV



MAV-A

Low cost drop in DC-2.5GHz 50ohm Amplifiers.  
PO=Poweroutput, NF= Noise figure

| Order No | Description  | Each   |
|----------|--|--------|
| MAR-1SM  | MMIC 0 – 1GHz, gain 17dB<br>PO= 0dBm, NF=5.5dB     | \$3.70 |
| MAR-3SM  | MMIC 0 – 2GHz, gain 13dB<br>PO= 7dBm, NF=6dB       | \$3.35 |
| MAR-4SM  | MMIC 0 – 2GHz, gain 8dB<br>PO= 10dBm, NF=6.5dB     | \$3.65 |
| MAR-6SM  | MMIC 0 – 2GHz, gain 16.5dB<br>PO= 0dBm, NF= 2.8dB  | \$3.35 |
| MAV-11+  | MMIC 0 – 1GHz, gain 12dB<br>PO= 17.5dBm, NF=3.6dB  | \$4.80 |
| MAV-11A  | MMIC 50 – 2GHz, gain 12dB<br>PO= 18.5dBm, NF=4.8dB | \$3.20 |

MAR-8 devices are potentially unstable devices & are not stocked by Mini-Kits. The ERA-3 is a good substitute to replace a MAR-8. The MAR-1/3/4/6SM a SMD Version is being supplied in place of the MAR-1/3/4/6 due to cost.

MAV11-A is a square SMD Package Type

FOR DATA SHEETS PLEASE VISIT  
[WWW.MINICIRCUITS.COM](http://WWW.MINICIRCUITS.COM)  
[WWW.RFMD.COM](http://WWW.RFMD.COM)

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AVOIDING ANY SUBSTITUTION OF MINI-CIRCUITS PROD-  
UCTS, WITH FAKE, OR OUT OF SPECIFICATION PRODUCTS  
SUPPLIED BY SOME DISTRIBUTORS**

MMIC Amplifier Experimenters Kit & PC Boards. Designed to experiment with the MAR/ERA/Gali devices.

Refer to [www.minikits.com.au/kits2.html](http://www.minikits.com.au/kits2.html) for prices.

## MONOLYTHIC AMPLIFIERS

### MINI-CIRCUITS ERA AMPLIFIERS



ERA

Miniature drop in DC-8GHz Microwave Amplifiers usable to 10GHz. PO= 18.5dBm, NF= 8.4dB

| Order No | Description                                      | Each          |
|----------|--|---------------|
| ERA-1+   | DC – 8GHz, gain 12dB<br>PO= 12dBm, NF= 5.3dB     | \$3.85        |
| ERA-2+   | DC – 6GHz, gain 16.4dB<br>PO= 13dBm, NF= 3.8dB   | <b>\$3.65</b> |
| ERA-3+   | DC – 3GHz, gain 21dB<br>PO= 12dBm, NF= 2.6dB     | \$4.70        |
| ERA-4+   | DC – 4GHz, gain 14.2dB<br>PO= 17.3dBm, NF= 5.2dB | \$7.65        |
| ERA-5+   | DC – 4GHz, gain 18.4dB<br>PO= 19.5dBm, NF= 4.5dB | <b>\$7.30</b> |
| ERA-6+   | DC – 4GHz, gain 11.3dB<br>PO= 19.6dBm, NF= 4dB   | <b>\$6.90</b> |

### MINI-CIRCUITS AMPLIFIERS



SOT-89



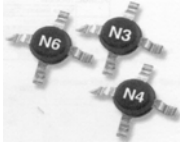
QFN

Low cost drop in DC-7GHz Microwave Amplifiers usable to 10GHz. The PMA-545+ is a PHEMT high performance MMIC suitable for use to 6GHz.

| Order No        | Description   | Each          |
|-----------------|---|---------------|
| GALI-84+        | DC – 6GHz, gain 19dB@2GHz<br>PO= 21dBm, NF= 5.5dB   | <b>\$5.85</b> |
| <b>GALI-39+</b> | <b>SMD SOT-89</b><br>DC – 7GHz, gain 19.7dB@2GHz<br>PO= 10.5dBm@7GHz, NF= 2.4dB   | <b>\$3.50</b> |
| <b>PHA-1+</b>   | <b>SMD SOT-89</b><br>0.05 – 6GHz, gain 13.5dB@2GHz<br>PO= 22dBm@2GHz, NF= 2.7dB   | <b>\$3.45</b> |
| <b>PMA-545+</b> | <b>SOT-89 Equivalent to WJ-AH1</b><br>0.05 – 6GHz, gain 20dB@1GHz<br>PO= 20dBm@1GHz, NF=0.8dB<br><b>SMD QFN 3x3mm Package</b> | <b>\$3.45</b> |

## MONOLYTHIC AMPLIFIERS

### RF MICRO DEVICES NLB AMPLIFIERS



NLB

RFMD NLB-300/310 Low Cost Drop in Amplifiers that are a better option than the ERA-1 @ 10GHz.

| Order No | Description  | Each   |
|----------|--|--------|
| NLB-300  | MMIC 0 – 10GHz, gain 8.9dB@10GHz<br>PO= +12.7dBm @ 10GHz, NF=5.0dB | \$5.50 |
| NLB-310  | MMIC 0 – 10GHz, gain 9.7dB@10GHz<br>PO= +13.1dBm @ 10GHz, NF=5.0dB | \$4.85 |

## MONOLYTHIC AMPLIFIERS



MMIC Amplifier Experimenters Kit & PC Boards. Designed to experiment with the MAR/ERA/Gali devices.

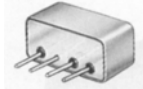
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## FREQUENCY MIXERS

### MINI-CIRCUITS MIXERS



ADE



TUF



RMS



MCA

All Mixers are Surface Mounted Types, except TUF-1 & require +7dBm ( 5mW ) of Local Oscillator injection. Maximum RF input power is +1dBm. Some models are suitable for building equipment up to 6GHz

| Order No  | Description   | Each           |
|-----------|---|----------------|
| ADE-1     | Double Balanced Mixer<br>L/O & RF 0.5 – 500MHz<br>I/F DC – 500MHz <b>+7dBm</b>              | \$5.50         |
| ADE-11X+  | Double Balanced Mixer<br>L/O & RF 10-2000MHz<br>I/F 5 - 1000MHz <b>+7dBm</b>                | \$5.95         |
| ADE-35+   | Double Balanced Mixer<br>L/O & RF 1600-3500MHz<br>I/F DC - 1500MHz <b>+7dBm</b>             | \$9.30         |
| MBA-591   | Double Balanced Mixer<br>L/O & RF 2800-5900MHz  | \$18.56        |
| MCA1-12G+ | Double Balanced Mixer<br>L/O & RF 3800-12000MHz<br>I/F DC - 1250MHz <b>+7dBm</b>            | <b>\$17.10</b> |
| MCA1-85+  | Double Balanced Mixer<br>L/O & RF 2800-5900MHz<br>I/F DC - 1800MHz <b>+7dBm</b>             | <b>\$13.98</b> |
| RMS-11X   | Double Balanced Mixer<br>L/O & RF 5– 1900MHz<br>I/F 5 – 1000MHz <b>+7dBm</b>                | \$10.80        |
| TUF-1+    | Double Balanced Mixer<br>L/O & RF 2 – 600MHz<br>I/F DC – 600MHz <b>+7dBm</b>                | \$14.95        |
| TUF-1H+   | Double Balanced Mixer<br>L/O & RF 2 – 600MHz<br>I/F DC – 600MHz<br><b>High Level +17dBm</b> | \$23.50        |

### MINI-CIRCUITS ATTENUATORS



DAT

| Order No    | Description  | Each   |
|-------------|--|--------|
| DAT31R5-SP+ | Digital Step Attenuator<br>DC-2400MHz 50ohm 31.5dB in<br>0.5dB Steps, Serial Interface | \$8.10 |

**LOW STOCK 1PCS EMAIL FIRST**

### HITTITE MIXERS



MS8

| Order No  | Description  | Each    |
|-----------|--|---------|
| HMC220MS8 | Hittite Double Balanced Mixer<br>L/O + RF 5-12GHz /F DC-4GHz | \$11.65 |

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