

MINI-CIRCUITS DESIGNER'S KITS  
**SPEED UP**  
 THE SOLUTION!



## DC to 4 GHz

### ERA-SM+ Features

- Wideband, 50  $\Omega$
- Up to +18.4 dBm typ. output power
- Low thermal resistance
- Miniature microwave amplifier
- Plastic micro-x surface mount package

**\$99.95**  
 only *ea. kit (3 models, 10 of each, 30 total)*



Evaluation boards available, \$79.95  
 See individual model data sheets.

### Kit K3-ERASM+ Electrical specifications of each model

Model	Freq. GHz ▲ $f_L$ - $f_U$	Gain, dB Typical					Min@ 2 GHz	Max. Pwr. (dBm) @ 1 GHz		Dynamic Range @ 1 GHz		VSWR (:1) Typ.				Absolute Max. Rating <sup>1</sup>		DC <sup>2</sup> Operating Power @ pin 3				Therm. Resist. $\theta_{jc}$ Typ. °C/W	Evaluation Board	
		0.1	1	2	3	4		Output (1 dB Comp.) Typ.	Input <sup>1</sup> Min.	NF (dB) Typ.	IP3 (dBm) Typ.	In DC-3 GHz	Out 3-4 GHz	DC-3 GHz	3-4 GHz	I (mA)	P (mW)	Current (mA)	Device Typ.	Min.	Max.			
ERA-4SM+	DC-4	14.3	14.0	13.4	12.7	11.8	11	17.3	15.0	20.0	4.2	34.0	1.2	1.2	1.3	1.8	120	650	65	4.5	4.2	5.5	196	TB-408-4+
ERA-5SM+	DC-4	20.2	19.5	17.6	15.6	14.0	16	18.4	16.5	13.0	4.3	32.5	1.3	1.3	1.2	1.3	120	650	65	4.9	4.2	5.5	133	TB-408-5+
ERA-6SM+	DC-4	12.6	12.5	12.2	11.7	11.3	10.5	17.9	16.0	20.0	4.5	36.0	1.3	1.2	1.6	1.8	120	650	70	5.0	4.6	5.6	143	TB-408-6+

Protected under U.S. Patent 6,943,629

▲ Low frequency cutoff determined by external coupling capacitors.  $f_U$  is the upper frequency limit for each model.

1. Permanent damage may occur if any of these limits are exceeded. These ratings are not intended for continuous normal operation.
2. Supply voltage must be connected to pin 3 through a bias resistor in order to prevent damage. See "Biasing MMIC Amplifiers" at [minicircuits.com/applications.shtml](http://minicircuits.com/applications.shtml). Reliability predictions are applicable at specified current and normal operating conditions.

