

MONOLITHIC AMPLIFIERS

Mini-Circuits®

50Ω Drop-In & Surface Mount

BROADBAND DC to 8 GHz



ERA



ERA-SM

All specifications at 25°C

MODEL NO.	★ FREQ. GHz f _l - f _u	GAIN, dB Typical										MAXIMUM POWER, dBm at 2 GHz* Output (1 dB Comp.)			DYNAMIC RANGE at 2 GHz*		VSWR Typ. (:1) In Out				MAXI- MUM RATING ³		DC POWER at Pin 3		THER- MAL RESIS- TANCE θ _{JC} , typ. °C/W	CAPD DATA (see RF/IF Designer hand- book)	Case Style Note B	CON- NECT- ION	Price \$ Qty. (30)
		over frequency, GHz								Min.@ 2 GHz	DC- 2 GHz	NF dB Typ.	IP3 dBm Typ.	DC-3 GHz	3-f _u ** GHz	DC-3 GHz	3-f _u ** GHz	I mA	P mW	Cur- rent (mA)	Volt Typ.								
		0.1	1	2	3	4	6	8	Flatness DC- 2 GHz																				
ERA-1	DC-8	12.2	12.1	11.8	11.5	11.3	11.0	10.2	9	±0.3	11.7	9.7	15	5.3	26	1.6	1.8	1.5	1.9	75	330	40	3.6	455	3-56	VV105	cb	1.37	
ERA-2	DC-6	16.2	16.0	15.6	15.1	14.6	14.0	—	12	±0.3	12.8	11	15	4.7	26	1.4	1.4	1.4	1.6	75	330	40	3.6	455	3-56	VV105	cb	1.52	
ERA-3	DC-3	22.9	22.2	20.8	19.2	—	—	—	17	±1.1	12.1	9	13	3.8	23	1.7	—	1.7	—	75	330	35	3.5	432	3-56	VV105	cb	1.67	
ERA-4	DC-4	13.8	13.7	13.5	13.3	13.0	—	—	11	±0.2	17.0	15	20	5.5	32.5	1.6	1.6	1.4	1.6	120	650	65	5.0	278	3-57	VV105	cb	3.85	
ERA-5	DC-4	20.2	19.8	18.8	17.7	16.4	—	—	16	±0.75	18.4	16.5	13	4.5	33	1.2	1.2	1.3	1.5	120	650	65	4.9	278	3-57	VV105	cb	3.85	
ERA-6	DC-4	11.1	11.1	11.3	11.5	11.3	—	—	10	±0.2	18.5	16.5	20	8.4	36.5	1.3	1.3	1.6	1.6	120	850	70	5.5	220	3-57	VV105	cb	3.85	
ERA-1SM	DC-8	12.3	12.1	11.8	11.2	10.8	10.4	9.2	9	±0.3	11.3	9.3	15	5.5	26	1.6	1.9	1.5	1.9	75	330	40	3.6	460	3-56	WW107	cb	1.42	
ERA-2SM	DC-6	16.2	15.8	15.2	14.4	13.6	13.0	—	12	±0.5	12.4	10.5	15	4.6	26	1.5	1.6	1.5	1.7	75	330	40	3.6	460	3-56	WW107	cb	1.57	
ERA-3SM	DC-3	22.8	21.8	20.2	18.4	—	—	—	16	±1.3	11.5	9	13	3.8	23	1.5	—	1.5	—	75	330	35	3.5	437	3-56	WW107	cb	1.72	
ERA-4SM	DC-4	14.0	13.8	13.5	13.2	12.7	—	—	11	±0.3	16.8	15	20	5.2	33	1.6	1.6	1.3	1.5	120	650	65	5.0	283	3-57	WW107	cb	3.90	
ERA-5SM	DC-4	20.2	19.5	18.5	17.3	16.2	—	—	16	±1.0	18.4	16.5	13	4.3	32.5	1.3	1.3	1.2	1.3	120	650	65	4.9	283	3-57	WW107	cb	3.90	
ERA-6SM	DC-4	11.2	11.2	11.3	11.4	11.2	—	—	10	±0.2	17.9	16	20	8.4	36	1.3	1.3	1.6	1.5	120	850	70	5.5	225	3-57	WW107	cb	3.90	

features

- miniature microwave amplifier
- available in drop-in & surface mount (sm) versions
- frequency range, DC to 8 GHz, usable to 10 GHz
- up to 18.5 dBm typ. (16.5 dBm min) output power

absolute maximum ratings

operating temperature: -45°C to 85°C

storage temperature: -65° to 150°C

device voltage: 3.0V min., 4.1V max. for ERA 1,2,3

4.2V min., 5.5V max. for ERA 4,5

5.0V min., 6.0V max. for ERA-6

NOTES:

* at 1 GHz for ERA 4, 5, 6, 4SM, 5SM, 6SM.

** f_u is the upper frequency limit for each model as shown in the table.

• Low frequency cutoff determined by external coupling capacitors.

A. Environmental specifications and re-flow soldering information available in General Information Section.

B. Units are non-hermetic unless otherwise noted. For details on case dimensions & finishes see "Case Styles & Outline Drawings".

C. Prices and Specifications subject to change without notice.

D. For Quality Control Procedures see Table of Contents, Section 0, "Mini-Circuits Guarantees Quality" article. For Environmental Specifications see Amplifier Selection Guide.

1. Model number designated by alphanumeric code marking.

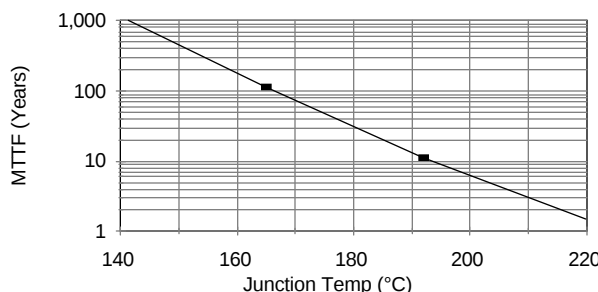
2. ERA-SM models available on tape and reel.

3. Operation at max. rating will severely decrease MTTF (ref to MTTF graph)

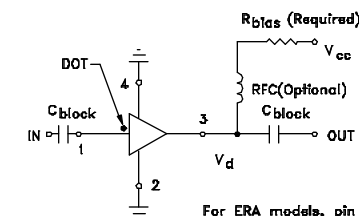
marking identification

Model	Alphanumeric Code
ERA-1, ERA-1SM	E1
ERA-2, ERA-2SM	E2
ERA-3, ERA-3SM	E3
ERA-4, ERA-4SM	E4
ERA-5, ERA-5SM	E5
ERA-6, ERA-6SM	E6

MTTF vs. JUNCTION TEMP. (ERA)



Typical Biasing Configuration ERA



For ERA models, pin 1 identified by dot.

designers kits available

KIT NO.	Model Type	No. of Units in Kit	Description	Price \$ per kit
K1-ERA	ERA	30	10 of each 1,2,3	49.95
K2-ERA	ERA	20	10 of each 4,5	69.95
K1-ERASM	ERA-SM	30	10 of each 1SM, 2SM, 3SM	49.95
K2-ERASM	ERA-SM	20	10 of each 4SM, 5SM	69.95
K3-ERASM	ERA-SM	30	10 of each 4SM, 5SM, 6SM	99.95

In Stock... Immediate Delivery

For Custom Versions Of Standard Models Consult Our Applications Dept.



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