

# HIGH-PERFORMANCE COMMUNICATION IF AMPLIFIER

## HIA SERIES



MODEL NUMBER *	FREQUENCY (MHz)	GAIN ( $\pm 0.5$ ) (dB, Min.)	GAIN VARIATION ( $\pm$ dB, P-P)	GROUP DELAY VARIATION (ns, Max.)	VSWR (Max.)	NOISE FIGURE (dB, Max.)	1 dB COMP. (dB, Min.)	DC POWER SUPPLY (volts/mA)
HIA-2-50-15-I/O	2 – 50	15	0.1	1	1.2:1	-	12	15 / 40
HIA-2-50-20-I/O	2 – 50	20	0.1	1	1.2:1	-	12	15 / 60
HIA-2-50-30-I/O	2 – 50	30	0.15	1	1.2:1	-	15	15 / 85
HIA-50-90-10-I/O	50 – 90	10	0.05	0.25	1.25:1	-	12	15 / 45
HIA-50-90-20-I/O	50 – 90	20	0.1	0.5	1.25:1	-	12	15 / 60
HIA-50-90-30-I/O	50 – 90	30	0.15	0.5	1.25:1	-	15	15 / 90
HIA-100-180-10-I/O	100 – 180	10	0.2	1	1.3:1	-	12	15 / 50
HIA-100-180-20-I/O	100 – 180	20	0.2	1	1.3:1	-	12	15 / 70
HIA-100-180-30-I/O	100 – 180	30	0.25	1	1.3:1	-	15	15 / 95
HIA-2-200-30-I/O	2 – 200	30	0.25	**	1.8:1	2	10	12 / 45
HIA-2-200-38-I/O	2 – 200	38	0.25	**	1.8:1	2	16	12 / 115
HIA-10-400-30-I/O	10 – 400	30	0.35	**	1.8:1	2.2	10	12 / 45
HIA-10-400-38-I/O	10 – 400	38	0.35	**	1.8:1	2.2	16	12 / 115
HIA-20-1000-32-I/O	20 – 1000	32	0.35	1	2:1	2.4	10	12 / 95
HIA-20-1000-40-I/O	20 – 1000	40	0.35	1	2:1	2.4	16	12 / 95
HIA-50-1500-32-I/O	50 – 1500	32	0.35	1	2:1	2.6	10	12 / 95
HIA-50-1500-40-I/O	50 – 1500	40	0.35	1	2:1	2.6	16	12 / 95
HIA-100-2000-32-I/O	100 – 2000	32	0.35	1	2:1	3.2	10	12 / 95
HIA-100-2000-40-I/O	100 – 2000	40	0.35	1	2:1	3.2	16	12 / 95

\* I = Input impedance; O = Output impedance.  
 For impedance of 75 ohms, I or O = 7; for impedance of 50 ohms, I or O = 5.  
 \*\* 2 to 20 MHz > 2 ns.

## MECHANICAL SPECIFICATIONS

### PHYSICAL

Dimensions ..... 1.3" x 7" x 1.5"

### CONNECTORS

Input/output ..... SMA or BNC female available, models up to 200 MHz,  
 SMA above 200 MHz.

DC power ..... Feedthru terminal

Housing ground ..... 2-56 terminal

## OPTIONS

**HIA-1** Slope adjustment of  $\pm 0.2$  dB minimum, if required, for compensating intra-system modules or system interconnections (models up to 180 MHz).