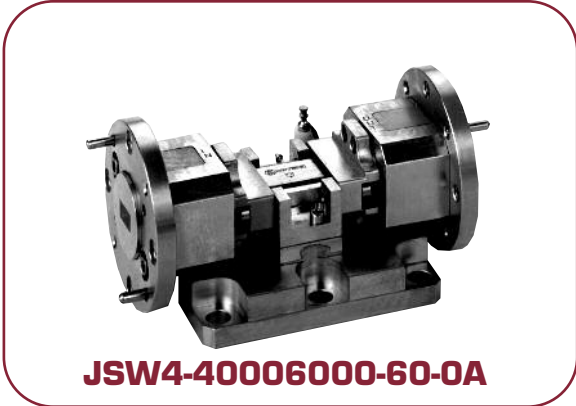


# 40 TO 60 GHz LOW-NOISE AMPLIFIERS

## FEATURES

- Low noise figure up to 60 GHz
- Linear phase and group delay
- WR22 and WR19 waveguide interfaces available
- Miniaturized for drop-in applications
- Hermetic sealed package
- Military temperature range applications



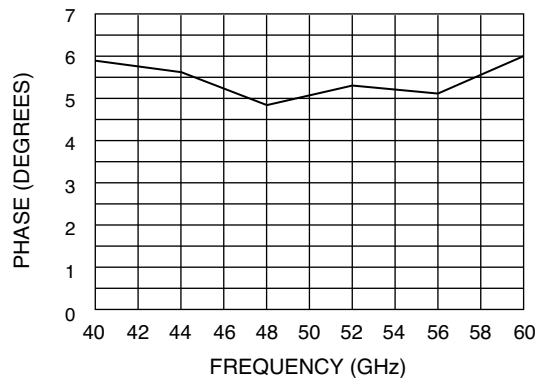
## SPECIFICATIONS

PARAMETERS*	UNITS	JSW4-40006000-60-0A
Frequency range	GHz	40–60
Gain	dB, min.	18
Gain flatness	dB	±2.5
Noise figure (including WG loss)	dB	6.0
Input/output VSWR	Max.	2.5:1
Reverse isolation	dB	35
Output power at 1 dB compression	dBm	0
DC power supply at 15 VDC	mA	175
Outline drawing	N/A	See Figure E, page 38

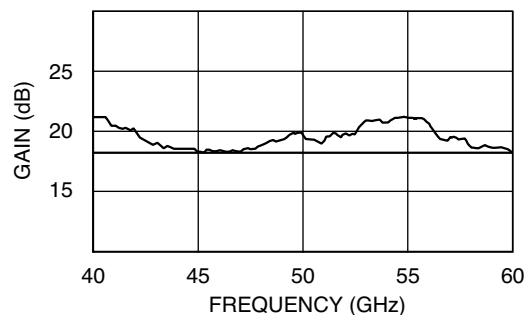
\* Electrical parameters are specified at 23°C.

FREQ. (GHz)	GAIN	VSWR IN/OUT	REV GAIN	1 dB COMP.
40	21.2	1.51/2.09	-57.1	7.4
42	19.9	1.60/1.40	-51.4	5.8
44	18.3	1.90/1.49	-49.1	3.4
46	18.0	1.23/1.59	-44.0	3.4
48	18.8	1.48/1.22	-37.4	3.5
50	19.6	2.20/1.39	-37.8	3.5
52	19.8	2.26/1.74	-44.1	2.4
54	20.9	2.07/1.85	-41.3	0.5
56	19.8	1.44/1.89	-43.4	0.6
58	18.6	2.19/1.77	-38.2	0.8
60	18.0	1.35/1.72	-39.8	0.9

NOISE FIGURE vs. FREQUENCY



GAIN vs. FREQUENCY



NOTE: The third letter of the part number prefix indicates package style.

Typical temperature coefficients:  
 Gain vs. temperature            dB per °C: 0.033  
 Noise figure vs. temperature    dB per °C: 0.062  
 Phase vs. temperature            Deg per °C: 0.4

