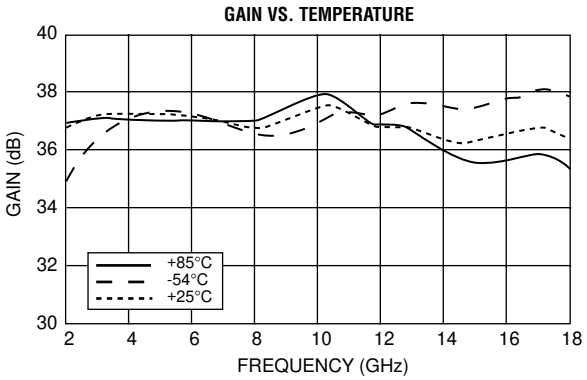
TEMPERATURE COMPENSATED AMPLIFIERS

AFS SERIES

In any solid state amplifier, both the gain and the noise figure will vary as a function of temperature. The overall gain of an uncompensated amplifier tends to decrease as the base plate temperature increases, while the noise figure will exhibit the opposite effect and increase as the temperature rises. The amount of change in gain is directly proportional to the number of stages in the device, the operating frequency, and the way the individual stages have been biased. In order to reduce this variation, it is often necessary to temperature compensate the amplifier.

AFS4-02001800-45-TC-5 TYPICAL DATA



MODEL NUMBER	FREQUENCY RANGE (GHz)	GAIN WINDOW (dB)	GAIN FLATNESS (±dB, Max.)	NOISE FIGURE (dB, Max.)	VSWR IN/OUT (Max.)	OUTPUT POWER @ 1 dB COMP. (dBm, Min.)	NOM. DC POWER (15 V, mA)	OUTLINE DRAWING
AFS2-01000200-15-TC-6	1–2	25-29	1	1.5	2:1	5	125	6
AFS3-01000200-15-TC-6	1–2	36-40	1	1.5	2:1	5	125	6
AFS2-02000400-15-TC-6	2–4	22-26	1	1.5	2:1	5	125	6
AFS3-02000400-15-TC-6	2–4	26-30	1	1.5	2:1	5	125	6
AFS2-04000800-20-TC-2	4–8	17-22	1	2	2:1	5	70	2
AFS3-04000800-18-TC-4	4–8	25-30	1	1.8	2:1	8	100	4
AFS2-02000800-40-TC-2	2–8	14-19	1.5	4	2:1	5	70	2
AFS3-02000800-30-TC-4	2–8	22-27	1.5	3	2:1	8	150	4
AFS4-02000800-26-TC-4	2–8	30-36	1.5	2.6	2:1	8	120	4
AFS2-08001200-30-TC-2	8–12	12-16	1	3	2:1	5	70	2
AFS3-08001200-22-TC-4	8–12	24-28	1	2.2	2:1	8	100	4
AFS4-08001200-20-TC-4	8–12	30-34	1	2	2:1	8	150	4
AFS4-12001800-30-TC-8	12–18	22-26	1	3	2:1	8	250	8
AFS6-12001800-30-TC-8	12–18	28-32	1	3	2:1	8	400	8
AFS4-08001800-35-TC-8	8–18	22-26	1	3.5	2:1	8	250	8
AFS6-08001800-35-TC-8	8–18	30-34	1	3.5	2:1	8	400	8
AFS4-06001800-35-TC-8	6–18	22-26	1	3.5	2:1	8	250	8
AFS6-06001800-35-TC-8	6–18	30-34	1	3.5	2:1	8	400	8
AFS4-02001800-45-TC-5	2–18	18-24	1.5	4.5	2.2:1	8	120	5
AFS5-02001800-45-TC-6	2–18	22-28	1.5	4.5	2.2:1	8	175	6

NOTES: All specifications guaranteed -54 to +85°C.
Please contact the factory for other frequencies, noise figures, and gain options. See page 59 for outline.