SHF Reference Circuits

47 to 47.2GHz

Analog Voice Mode	SSB	FM
Emission Designator	2K70J3E	11K0F3E,16K0F3E,20K0F3E
Transmit Power (dBW)	-40 to -10	-40 to -10
Feeder Loss (dB)	1	1
Transmit Antenna Gain	41	41
Typical EIRP (dBW)	0 to 30	0 to 30
Antenna Polarization	Horizontal	Vertical
Receiver IF Bandwidth (kHz)	2.7	9, 15
Receiver Noise Figure	3 to 10	3 to 10

Morse (CW) Mode	Morse 10-50 Bd	EME (600s Average with software to detect -40dB SNR)
Emission Designator	150HA1A,150HJ2A	50H0A1A, 50H0J2A
Transmit Power (dBW)	-40 to -10	+17
Feeder Loss (dB)	1	1
Transmit Antenna Gain	41	59
Typical EIRP (dBW)	0 to 30	75
Antenna Polarization	Horizontal	Linear
Receiver IF Bandwidth (kHz)	0.4	0.4
Receiver Noise Figure	3 to 10	6

76 to 81GHz This is a relatively new band for hams—technology is still evolving.

Analog Voice Mode	SSB	FM
Emission Designator	2K70J3E	11K0F3E,16K0F3E,20K0F3E
Transmit Power (dBW)	-40 to -20	-40 to -20
Feeder Loss (dB)	1	1
Transmit Antenna Gain	46	46
Typical EIRP (dBW)	5 to 25	5 to 25
Antenna Polarization	Horizontal	Vertical
Receiver IF Bandwidth (kHz)	2.7	9, 15
Receiver Noise Figure	3 to 10	3 to 10

Morse (CW) Mode	Morse 10-50 Bd
Emission Designator	150HA1A,150HJ2A
Transmit Power (dBW)	-40 to -20
Feeder Loss (dB)	1
Transmit Antenna Gain	46
Typical EIRP (dBW)	5 to 25
Antenna Polarization	Horizontal
Receiver IF Bandwidth (kHz)	0.4
Receiver Noise Figure	3 to 10