

SSPA - POWER AMPLIFIERS

PERFORMANCE CHARACTERISTICS

Model	SPA-X1-400	SPA-X2-100	SPA-KU1-400	SPA-KU2-100
Frequency Range (GHz)	8.5 to 10.9	8.5 to 10.9	13.5 to 16.8 or 14.5 to 17.0	13.5 to 16.8 or 14.5 to 17.0
Bandwidth, max (MHz)	400	800	1,000	500
Peak Saturated Output Power, min (W)	400	100	400	100
Average Output Power (W)	100	25	100	25
Load VSWR, max	2:1	2:1	2:1	2:1
Input RF Drive (dBm) ⁽¹⁾	23 ± 1 dB	-1 ± 5 dBm	10 ± 1 dB	12 ± 1 dB
Large Signal Gain, min (dB)	36	52	49	41
Pulse Width (µs)	0.2 - 15	0.4 - 256	0.5 - 25	0.5 - 45
Duty Cycle, max (%)	25	25	25	25
PRF (kHz)	2 - 240	1 - 15	2 - 600	2 - 320
Input Supply Voltage (V)	30 to 60	18 to 32	18 to 32	30 to 60
Current, max (Amp)	28	8	30	10
Efficiency, min (%)	17	17	15	15
RF Input Connector	SMA			
RF Output Connector	TNC			
Operating Temperature Range (°C)	-40 to +85			
Environmental Specifications	Per airborne applications			
MTBF, min (Hours)	12,000	25,000	12,000	25,000
Dimensions, approx. mm (inches)	280 x 140 x 75 (11 x 5.5 x 2.9)	229 x 178 x 30.5 (9 x 7 x 1.2)	280 x 140 x 75 (11 x 5.5 x 2.9)	229 x 178 x 30.5 (9 x 7 x 1.2)
Graceful Degradation	Embedded			
Switching Power Supply	Ultra quiet, non-synchronized architecture			

(1) Other Input Power levels are Optional

