

DATASHEET - SPA100

rev A - DRAFT

S-band GaN Power Amplifier			min	typ	max	unit	note
1.0	General		The SPA100 is an S-band GaN Power Amplifier module designed for 9cm Ham Radio communication systems. The unit includes an output isolator to protect the output stage against excessive mismatch.				
1.1	RF frequency			3.4		GHz	
1.2	Gain			45		dB	
1.3	RF output power, Psat	@ Vdd = 30V	100			W	
			50			dBm	
1.4	In- and Output- impedance			50		Ohm	
1.5	Input return loss			13		dB	
1.6	Output return loss			17		dB	
1.7	Input drive level			5	10	dBm	
1.8	Supply voltage, Vdd		24	30	36	V	
1.9	Supply current, Idd	@ Pout = 100W			7	A	
1.10	Electrical stability		unconditional			with matched input port	
1.11	Input connector		SMA/f				
1.12	Output connector		N-type/f				
1.13	DC/control connector	type	D-sub-7, male			a mating D-sub-7 connector is included in delivery	
		functions	TLL-enable, RF out, Idd sense				
		pinning	as indicated on housing				
1.14	Dimensions		200 x 95 x 27			mm	overall
1.15	Weight			800		g	
1.16	Heatsink requirement				0.1	K/W	use heatsink compound
1.17	Mounting holes		4 x M4			in 164 x 87 mm pattern	
1.18	Operational temperature range		-25		+55	°C	
1.19	Humidity protection		none				