



SPA3338-40-50
3.3 TO 3.8 GHz 100W
LINEAR POWER AMPLIFIER

The SPA3338-40-50 Linear High-Power Amplifier is ideal for 5G, Digital Video links, and other TDD and Communication applications.

The modules utilize high power advanced GaN devices housed in compact machined Aluminium enclosure offering high gain & power, high efficiency and low distortions.

The exceptional performance has been achieved by careful design of matching networks using both commercial and proprietary CAD software. In addition, using load-pull data and EM simulations have resulted in consistent and repeatable performance with the highest reliability.

Key Features: -

- Waveform Engineered Solid State design
- Broadband performance
- Suitable for use with CW, AM/FM and higher ordered modulation schemes including QAM, COFDM and 5G.
- Temperature Monitor
- Optional features such as:
 - Forward Power Monitor
 - TDD Control



Parameter	Value	Remark
Electrical Specification		
Operating Frequency	3300 - 3800MHz	
Operating Bandwidth	500MHz	
Output Power P _{sat}	100W typ	10W COFDM Power
Small Signal Gain	40dB min	
Gain Flatness	±1.5	Over full band
Input Return Loss	-10dB	
Noise Figure	7dB	
Linearity	≥30	Typ shoulder level at 40dBm average output
Harmonics @ P _{out} = 40dBm	15dB min	
Non-Harmonic Spurious Level	60dBc min	
Operating Voltage	35V typ	Range: 34V-36V
Current Consumption	9A max at P _{sat}	
Quiescent Current	1.3A typ	
Operating Temperature	-20°C to +50°C	Base Plate Temperature
Storage Temperature	-30°C to +60°C	
Relative Humidity	95%	Non-condensing
Interface		
RF Input/Output Connector	SMA Female	
DC and Control (Optional: TDD Control)	Pin A1 = +35V Pin A2 = GND Pin 1 = Enable/Disable Pin 2 = N/C Pin 3 = N/C Pin 4 = TDD Control (Optional) Pin 5 = Temperature Monitor	Enable: TTL 'Low' Disable: TTL 'High' or Open Active 'High' STD TTL Logic Analog DC Voltage (0.75V@25degC)
Mechanical		
Dimensions	180mm x 95mm x 25.5mm	
Weight	800g	
Surface Finish	Iridite NCP	
Limits		
Input RF Drive Level without damage	+15dBm max	
Load VSWR @ P _{out} = 100W	3:1 @ all loads phase and amplitude continuous	
Thermal Degradation	+85°C	

Specification subject to change without notice

**For Price and Delivery information please contact the Sales Team
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