

0.5 ~ 2GHz GaN >50W High Power SSPA Module

FEATURES

- Freq : 0.5 ~ 2 GHz Full Band
- P_{out} : 50W, min.
- P_{in} : 0 ~ +5dBm

ELECTRICAL SPECIFICATIONS (@+48V VDC, 25°C)

Parameter	Min	Typ	Max	Unit	Remark
Operating Frequency	0.5		2	GHz	
Power Output, Psat	+47			dBm	@0dBm Pin
Input Power	0		+5	dBm	
Power Gain		57		dB	
Input VSWR			2.0:1		
Output VSWR			2.0:1		
Non-harmonic Spurious		-60		dBc	
2 nd harmonic		-10		dBc	
On/Off Switching Time			1	usec	TTL Enable/Disable
Operating Voltage**		+48		Volt	

NOTE - **Amplifier can continuously operate up to +31V max with higher output power, without damage.

Mechanical Specification

Parameter	Value	Units
Dimensions	205 x 145 x 28, typ.	mm
RF Connectors In/Out	Input: SMA Female ; Output: SMA Female	
DC & Control Connectors	7W2 socket	
Cooling	External Heatsink is required (by customer)	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Min	Typ	Max	Unit	Remark
Operating Temperature***	-40		+65	°C	Baseplate(Case)
Storage Temperature	-40		+85	°C	
Relative humidity (non-condensing)			95	%	
Cooling	External heatsink is required by the customer				

NOTE - ***For the better MTBF of long-time operation, Transcom strongly suggest the customer's system to equip with sufficient heatsink for keeping the amplifier baseplate(case) temp below the maximum specs temp(+65C)

RF ON / OFF, PROTECTIONS, MONITORING

Parameter	Value	Remark
RF On/ Off	Enable: TTL 'H', Disable: TTL 'L'	
Input Power	+10dBm, max.	Without damage
Over Temperature Auto-Shutdown Protection	Auto-shutdown: +68~+70C ; Auto-recovery: +60~+63C	