## **ELECTRICAL SPECIFICATIONS -FOR MMIC POWER AMPLIFIER EVAL BOARD**

S.No.5	Parameter	Type 5
		EVAL Board for Type 1, (Ku-Band 20 Watts packaged GaN MMIC HPA)
1.	Input Frequency (Fin)	6-12 GHz
2.	Small signal Gain	>30dB
3.	Saturated Output power	+46dBm(typical) CW mode
4.	Output power at P3dB:	+45dBm(typical) CW mode
5.	Gain at P3dB	> 20dB
6.	Supply Voltage	20V
7.	Supply Current	6A (typical with RF drive)
8.	Operating temperature:	-40°C to +60°C
9.	Input/ Output	50 ohms matched
10.	Harmonic suppression:	better than -30dBc @12GHz
11.	ThetaJC	< 1 °C/W
12.	EVAL BOARD SHOULD BE SUPPLIED WITH THESE REQUIREMENTS.	<ul> <li>a. Eval board should be a ready to test PCB with all components including MMIC amplifier mounted.</li> <li>b. Eval board should also have already mounted RF in and out connectors and provision to connect DC supply to the MMIC.</li> <li>c. Eval board must accompany with test results and test procedure.</li> <li>d. Manufacturer should provide layout details and assembly drawing of the eval board.</li> <li>e. Manufacturer should also provide PCB substrate material details and bill of material of this eval board.</li> </ul>
		f. Availability of measured Sparameters of the MMIC amplifier.



S.No.6	Parameter	Type 6
		EVAL Board For Type 2,(Ku-Band packaged GaN MMIC driver amplifier
1.	Input Frequency (Fin)	6-12 GHz
2.	Small signal Gain	23dB typical mid-band gain
3.	Saturated Output power	+34dBm(typical) CW mode
4.	Output power at P3dB:	>+30dBm CW mode
5.	Gain at P3dB	> 18dB @ 12GHz
6.	Supply Voltage	22V
7.	Supply Current	650mA (typical with RF drive)
8.	Operating temperature:	-40°C to +60°C
9.	Harmonic suppression	better than -30dBc
10.	ThetaJC	< 12 °C/W
11.	EVAL BOARD SHOULD BE SUPPLIED WITH THESE REQUIREMENTS.	<ul> <li>a. Eval board should be a ready to test PCB with all components including MMIC amplifier mounted.</li> <li>b. Eval board should also have already mounted RF in and out connectors and provision to connect DC supply to the MMIC.</li> <li>c. Eval board must accompany with test results and test procedure.</li> <li>d. Manufacturer should provide layout details and assembly drawing of the eval board.</li> <li>e. Manufacturer should also provide PCB substrate material details and bill of material of this eval board.</li> <li>f. Availability of measured Sparameters of the MMIC amplifier.</li> </ul>

