

# Product Selection Guide



Nitronex products are optimized for broadband performance to deliver high power, high efficiency and better linearity while meeting reliability requirements, making them the preferred choice for military and commercial applications.

## GaN RF Power Transistors

Part Number	Freq Range (GHz)	Supply Voltage (V)	Test Frequency (GHz)	CW Output Power P <sub>SAT</sub> (W)	Gain @ P <sub>SAT</sub> (dB)	CW Drain Efficiency @ P <sub>SAT</sub> (%)	Thermal Resistance (°C/W)	Package
NPTB00004	DC to 6.0	28	2.5	5	16.5	55	23	SOIC-8
NPT25015	DC to 3.0	28	2.5	23	11.0	58	6.3	SOIC-8
NPT35015	3.0 to 6.0	28	3.5	18	9.0	48	6.3	SOIC-8
NPT1012	DC to 4.0	28	3.0	25	10.0	65	4.0	AC200B
NPTB00025	DC to 4.0	28	3.0	25	11.0	65	5.3	AC200B
NPT1004	DC to 4.0	28	2.5	40	12.0	55	4.3	SOIC-8
NPTB00050	DC to 4.0	28	3.0	50	9.5	60	3.2	AC360B
NPT35050A	3.3 to 3.8	28	3.5	65	10.0	45	2.0	AC780B-2
NPT1010	DC to 2.0	28	0.9	100	16.5	65	1.4	AC360B AC360P
NPT25100 NPT25100P	0.7 to 2.7	28	2.5	90	15.0	62	1.8	AC780B-2 AC780P-2
<b>NPT1014</b>	<b>DC to 2.5</b>	<b>28</b>	<b>1.0</b>	<b>50</b>	<b>12.0</b>	<b>60</b>	<b>1.8</b>	<b>AC360B</b>
NPT1007	DC to 1.2	28	0.9	200	16.0	63	1.0	AC780B-4

## GaN RF MMICs

Part Number	Freq Range (GHz)	Supply Voltage (V)	Test Frequency (GHz)	CW Output Power P <sub>SAT</sub> (W)	Gain @ P <sub>SAT</sub> (dB)	CW Drain Efficiency @ P <sub>SAT</sub> (%)	Thermal Resistance (°C/W)	Package
NPA1001*	2.5 to 6.0	28	2.5 / 6	10	9.0	23	4.0	AC385B
NPA1003	DC-1.5	28	1.0	5	14.0	45	12	4X4 QFN-16



## Recommended Lineups

Frequency (MHz)	Output Power (W)	Gain (dB)	Pre-Driver	Driver	Final
30 to 512	20	43	-	NPA1003 / NPTB00004	NPT1012
30 to 512	60	40	NPA1003 / NPTB00004	NPT1012	NPT1010
30 to 1000	15	30	-	NPA1003 / NPTB00004	NPT1012
30 to 1000	40	40	NPA1003	NPT1012	NPT1014
30 to 1000	80	40	NPA1003	NPT1012	2xNPT1014
1000 to 2500	20	25	-	NPTB00004	NPT1012
1000 to 2000	40	35	NPTB00004	NPT1012	NPT1014
1000 to 2000	50	35	NPTB00004	NPT1012	NPT1014
1000 to 2000	80	35	NPTB00004	NPT1012	2xNPT1014

\* = ITAR Restricted

New products are in Blue  
Preview products are in Red