

Product Selection Guide



Our GaN RF power transistors offer higher power densities, higher efficiency, and broader bandwidth than the competition, making them a good choice for military and commercial wireless and infrastructure applications. Visit www.nitronex.com for design support and detailed product information.

RF Power Transistors

Part Number	Freq Range (GHz)	Supply Voltage (V)	Test Frequency (GHz)	Output Power P _{SAT} (W)	Power Gain (dB)	CW Drain Efficiency @ P _{SAT} (%)	Thermal Resistance (°C/W)	Package
NPTB00004	DC-6.0	28	2.5	5	19.5	55	23	PO150S
NPT25015	DC-3.0	28	2.5	23	14.0	58	6.3	PO150S
NPT35015	3.0-6.0	28	3.5	18	11.0	48	6.3	PO150S
NPT1012	DC-4.0	28	3.0	25	12.0	65	4.0	AC200B
NPTB00025	DC-4.0	28	3.0	25	13.5	65	5.3	AC200B
NPT1004	DC-4.0	28	2.5	40	13.5	55	4.3	PO150S
NPTB00050	DC-4.0	28	3.0	50	11.5	60	3.2	AC360B
NPT35050A	3.3-3.8	28	3.5	65	12.5	45	2.0	AC780B-2
NPT1010	DC-2.0	28	0.9	100	16.5	65	1.4	AC360B AC360P
NPT25100	0.7-2.7	28	2.5	90	16.5	62	1.75	AC780B-2 AC780P-2
NPT1007	DC-1.2	28	0.9	200	18.3	63	1.0	AC780B-4

New products are in Blue
Preview products are in Red

Recommended Lineups

Frequency	Output Power	Application	Gain	Pre-Driver	Driver	Final
500-1000MHz	80W	CW	30dB	NPTB00004	NPT1012	NPT1007
500-1000MHz	60W	CW	33dB	NPTB00004	NPT1012	NPT1010
500-1000MHz	20W	CW	40dB	NPTB00004	NPT25015	NPTB00050
500-1000MHz	15W	CW	40dB	NPTB00004	NPT25015	NPT1012
2.5-2.7GHz	20W ²	WiMAX	41dB	NPTB00004	NPT25015	2xNPT25100
2.5-2.7GHz	10W ²	WiMAX	41dB	NPTB00004	NPT25015	NPT25100
2.5-2.7GHz	5W ²	WiMAX	24dB	-	NPTB00004	NPT1004
1.93-1.99GHz 2.11-2.17GHz	20W ¹	PCS/UMTS/LTE	42dB	NPTB00004	NPT25015	NPT25100
1.93-1.99GHz 2.11-2.17GHz	8W ¹	PCS/UMTS/LTE	25dB	-	NPTB00004	NPT1004

¹Single carrier W-CDMA, 3GPP Test Model 1/64, 8.5dB PAR
²Single carrier OFDM, 10.3dB PAR, 10MHz Channel, Continuous data

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