Product Selection Guide

Our GaN RF power transistors offer higher power densities, higher efficiency, and broader bandwidth than competing technologies, making them a good choice for military and commercial wireless and infrastructure applications.

RF Power Transistors

Part Number	Package	Band (GHz)	Supply Voltage (V)	Test Frequency (GHz)	Output Power P_{SAT} (W)	Power Gain (dB)	CW Drain Efficiency @ P_{SAT} (%)	Thermal Resistance (°C/W)	Linear Output Power
NPTB00004	PO150S	DC-6.0	28	2.5	5	19.5	55	23	0.8W, 2% EVM[2] 0.4W, 2% EVM[3]
NPT25015	PO150S	DC-3.0	28	2.5	23	14.0	58	6.25	1.5W, 2%EVM[2]
NPT35015	PO150S	3.0-6.0	28	3.5	18	11.0	48	6.25	1.5W, 2% EVM[3]
NPTB00025	AC200B	DC-4.0	28	3.0	25	13.5	65	5.25	
NPT1012	AC200B	DC-6.0	28	3.0	25	14.0	65	4.0	
NPT1004	PO150S	DC-4.0	28	2.5	40	13.5	55	4.3	5W, 2% EVM[2] 4.5W, 2% EVM[3] 8W, -35dBc ACPR[1]
NPTB00050	AC360B	DC-4.0	28	3.0	50	11.5	60	3.2	
NPT35050A	AC780B-2	3.3-3.8	28	3.5	65	12.5	45	1.95	6W, 2% EVM[3]
NPT25100	AC780B-2 AC780P-2	1.7-2.7	28	2.5	90	16.5	62	1.75	10W, 2% EVM[2] 20W, -35dBc ACPR[1]
NPT1010	AC360B	DC-2.0	28	0.9	100	18.7	65	1.4	
NPT1007	AC780B-4	DC-1.2	28	0.9	200	18.3	63	1.0	

New products are in Red
Preview products are in Blue

Recommended Lineups

Pre-Driver	Driver	Final	Application	Frequency	Gain	Output Power
NPTB00004	NPT25015	2xNPT25100	WiMAX	2.5-2.7GHz	41dB	20W, 2% EVM[2]
NPTB00004	NPT25015	NPT25100	WiMAX	2.5-2.7GHz	41dB	10W, 2% EVM[2]
-	NPTB00004	NPT1004	WiMAX	2.5-2.7GHz	24dB	5W, 2% EVM[2]
NPTB00004	NPT25015	NPT25100	PCS/UMTS/LTE	1.93-1.99GHz 2.11-2.17GHz	42dB	20W, -35dBc ACPR[1]
-	NPTB00004	NPT1004	PCS/UMTS/LTE	1.93-1.99GHz 2.11-2.17GHz	25dB	8W, -35dBc ACPR[1]
NPTB00004	NPT25015	NPT25100	GSM	800-1000MHz	48dB	50W
-	NPTB00004	NPT1004	GSM	800-1000MHz	32dB	25W
NPTB00004	NPTB00025	NPT25100	CW	500-1000MHz	33dB	50W CW
NPTB00004	NPT25015	NPTB00050	CW	500-1000MHz	40dB	25W CW

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PO150S AC200B AC200P AC360B/C AC360P AC780B-2 AC780P-2 AC780B-4 AC1230B-4

[1]Single carrier W-CDMA, 3GPP Test Model 1/64
[2]Single carrier OFDM, 10.3dB PAR, 10MHz Channel, Continuous data
[3]Single carrier OFDM, 10.3dB PAR, 3.5MHz Channel, 75% frame data