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RF Power Product Selection Guide

LDMOS Transistors and ICs

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Product Selection Guide

INFINEON'S state-of-the-art LDMOS technology, high-volume manufacturing facilities and fully-automated production assembly and test lines enable us to provide one of the most comprehensive RF power product portfolios in the industry. For additional information contact us at highpowerRF@infineon.com, and on the web at www.infineon.com/rfpower.

LDMOS RF Power Transistors

Product	Operating Frequency [MHz]	Matching	P _{-1dB} Typ [W]	Gain Typ [dB]	Eff Typ [%]	P _{OUT} Avg [W]	Test Signal	Supply Voltage Typ [V]	θ _{JC} [°C/W]	Package Type
420 MHz to 500 MHz										
PTFA041501E	420-500	I	175	21	41	60	CDMA	28	0.28	H-36248-2
PTFA041501F	420-500	I	175	21	41	60	CDMA	28	0.28	H-37248-2
470 MHz to 860 Mhz										
PTFA043002E	470-860	I	300	16	28	100	8VSB	32	0.23	H-30275-4
725 MHz to 770 MHz										
PTFA070601E	725-770	I	60	19	40	25	CW 2T	30	0.80	H-36265-2
PTFA070601F	725-770	I	60	19	40	25	CW 2T	30	0.80	H-37265-2
PTFA071701E	725-770	I/O	170	18	27	40	WCDMA	30	0.30	H-36248-2
PTFA071701F	725-770	I/O	170	18	27	40	WCDMA	30	0.30	H-37248-2
PTFA072401EL	725-770	I/O	240	19	25	40	WCDMA	30	0.28	H-33288-2
PTFA072401FL	725-770	I/O	240	19	25	40	WCDMA	30	0.28	H-34288-2
860 MHz to 960 MHz										
PTFA080551E	869-960	I	75	18	44	26	EDGE	28	0.80	H-36265-2
PTFA080551F	869-960	I	75	18	44	26	EDGE	28	0.80	H-37265-2
PTFA081501E	864-900	I/O	160	18	31	35	CDMA	28	0.44	H-36248-2
PTFA082201E	869-894	I/O	250	18	30	55	WCDMA	30	0.25	H-36260-2
PTFA082201F	869-894	I/O	250	18	30	55	WCDMA	30	0.25	H-37260-2
PTFA091201E	920-960	I/O	135	19	44	50	EDGE	28	0.41	H-36248-2
PTFA091201F	920-960	I/O	135	19	44	50	EDGE	28	0.41	H-37248-2
PTFA092201E	920-960	I/O	250	18.5	30	55	WCDMA	30	0.25	H-36260-2
PTFA092201F	920-960	I/O	250	18.5	30	55	WCDMA	30	0.25	H-37260-2
PTFA092211EL	920-960	I/O	250	18	30	50	WCDMA	30	0.25	H-33288-2
PTFA092211FL	920-960	I/O	250	18	30	50	WCDMA	30	0.25	H-34288-2
PTFA092213EL	920-960	I/O	240	17.5	29	50	WCDMA	30	0.23	H-33288-6
PTFA092213FL	920-960	I/O	240	17.5	29	50	WCDMA	30	0.23	H-34288-6
1450 MHz to 1500 MHz										
PTF140451E	1450-1550	I/O	60	18	27.5	12.5	DAB	28	1.00	H-30265-2
PTF140451F	1450-1550	I/O	60	18	27.5	12.5	DAB	28	1.00	H-31265-2
PTF141501E	1450-1500	I/O	150	16.5	29	50	DAB	32	0.40	H-30260-2
PTFA142401EL	1450-1500	I/O	240	16.5	27.5	50	DVB-T	30	0.28	H-33288-2
PTFA142401FL	1450-1500	I/O	240	16.5	27.5	50	DVB-T	30	0.28	H-34288-2
1800 MHz to 2000 MHz										
PTF180101S	1805-2170	I	15	19	28	4	EDGE	28	3.00	H-32259-2
PTFA180701E	1805-1880	I/O	72	16.5	40.5	25	EDGE	28	0.87	H-36265-2
PTFA180701F	1805-1880	I/O	72	16.5	40.5	25	EDGE	28	0.87	H-37265-2
PTFA181001E	1805-1880	I/O	120	16.5	36	45	EDGE	28	0.43	H-36248-2
PTFA181001F	1805-1880	I/O	120	16.5	36	45	EDGE	28	0.43	H-37248-2
PTFB182503EL	1805-1880	I/O	240	19	28	50	WCDMA	30	0.26	H-33288-6
PTFB182503FL	1805-1880	I/O	240	19	28	50	WCDMA	30	0.26	H-34288-6
PTFA190451E	1930-1990	I/O	60	17.5	28	11	WCDMA	28	0.83	H-36265-2
PTFA190451F	1930-1990	I/O	60	17.5	28	11	WCDMA	28	0.83	H-37265-2
PTFA191001E	1930-1990	I/O	130	17	28	25	WCDMA	30	0.42	H-36248-2
PTFA191001F	1930-1990	I/O	130	17	28	25	WCDMA	30	0.42	H-37248-2

LDMOS RF Power Transistors

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1800 MHz to 2000 MHz [continued]										
PTFB191501E	1930-1990	I/O	150	18	30	35	WCDMA	30	0.29	H-36248-2
PTFB191501F	1930-1990	I/O	150	18	30	35	WCDMA	30	0.29	H-37248-2
PTFA192001E	1930-1990	I/O	220	15.9	27	50	WCDMA	30	0.28	H-36260-2
PTFA192001F	1930-1990	I/O	220	15.9	27	50	WCDMA	30	0.28	H-37260-2
PTFA192401E	1930-1990	I/O	240	16	27	50	WCDMA	30	0.23	H-36260-2
PTFA192401F	1930-1990	I/O	240	16	27	50	WCDMA	30	0.23	H-37260-2
PTFB192503EL	1805-1880	I/O	240	19	28	50	WCDMA	30	0.26	H-33288-6
PTFB192503FL	1805-1880	I/O	240	19	28	50	WCDMA	30	0.26	H-34288-6

2100 MHz to 2200 MHz

PTF210451E	2010-2170	I/O	50	14	27	11.5	WCDMA	28	1.00	H-30265-2
PTF210451F	2010-2170	I/O	50	14	27	11.5	WCDMA	28	1.00	H-31265-2
PTFA210601E	2110-2170	I/O	68	16	27	12	WCDMA	28	0.89	H-36265-2
PTFA210601F	2110-2170	I/O	68	16	27	12	WCDMA	28	0.89	H-37265-2
PTFA210701E	2110-2170	I/O	80	16.5	29	18	WCDMA	30	0.92	H-36265-2
PTFA210701F	2110-2170	I/O	80	16.5	29	18	WCDMA	30	0.92	H-37265-2
PTFB211501E	2110-2170	I/O	150	18	30	32	WCDMA	30	0.30	H-37248-2
PTFB211501F	2110-2170	I/O	150	18	30	32	WCDMA	30	0.30	H-36248-2
PTFA211801E	2110-2170	I/O	180	15.5	27.5	35	WCDMA	28	0.31	H-36260-2
PTFA211801F	2110-2170	I/O	180	15.5	27.5	35	WCDMA	28	0.31	H-37260-2
PTFA212001E	2110-2170	I/O	220	15.8	28	50	WCDMA	30	0.28	H-36260-2
PTFA212001F	2110-2170	I/O	220	15.8	28	50	WCDMA	30	0.28	H-37260-2
PTFA212401E	2110-2170	I/O	240	15.8	28	50	WCDMA	30	0.23	H-36260-2
PTFA212401F	2110-2170	I/O	240	15.8	28	50	WCDMA	30	0.23	H-37260-2
PTFB212503EL	2110-2170	I/O	240	18	31	55	WCDMA	30	0.26	H-33288-6
PTFB212503FL	2110-2170	I/O	240	18	31	55	WCDMA	30	0.26	H-34288-6
PTFB213004F	2110-2170	I/O	300	18	28	65	WCDMA	30	—	H-37275-8

2400 MHz to 2700 MHz

PTF240101S	2400-2700	I	15	16	18	2	CDMA	28	3.00	H-32259-2
PTFA240451E	2420-2480	I/O	50	14	31	14	CDMA	28	0.89	H-30265-2
PTFA241301E	2420-2480	I/O	140	14	25	25	CDMA	28	0.40	H-30260-2
PTFA241301F	2420-2480	I/O	140	14	25	25	CDMA	28	0.40	H-31260-2
PTFA260451E	2620-2680	I/O	50	14	24	10	CDMA	28	0.88	H-30265-2
PTFA260851E	2500-2700	I/O	100	14	22	16	WiMAX	28	0.40	H-30248-2
PTFA260851F	2500-2700	I/O	100	14	22	16	WiMAX	28	0.40	H-31248-2
PTFA261301E	2620-2680	I/O	152	13	24	26	CDMA	28	0.39	H-30260-2
PTFA261301F	2620-2680	I/O	152	13	24	26	CDMA	28	0.39	H-31260-2
PTFA261702E	2500-2700	I/O	170	15	20	32	WiMAX	28	0.27	H-30275-4

LDMOS Integrated RF Power Amplifiers

PTMA080152M	700-1000	I	20	30	34	8	GSM/EDGE	28	8.5/2.5	PG-DSO-20-63
PTMA080302M	700-1000	I	30	31	36	15	GSM/EDGE	28	6.7/1.7	PG-DSO-20-63
PTMA080304M	700-1000	I	40	31	50	—	CW	28	8.5/2.3	PG-DSO-20-63
PTMA180402EL	1800-2000	I	40	30	14	4	CDMA	28	3.5/1.1	H-33265-8
PTMA180402FL	1800-2000	I	40	30	14	4	CDMA	28	3.5/1.1	H-34265-8
PTMA180402M	1800-2200	I	40	30	16	5	CDMA	28	3.6/1.5	PG-DSO-20-63
PTMA210152M	1800-2200	I	20	28.5	33	7	WCDMA	28	10.7/2.9	PG-DSO-20-63
PTMA210304M	1900-2200	I	40	30	50	—	CW	28	8.5/2.3	PG-DSO-20-63
PTMA210404FL	1900-2200	I	40	30	55	—	CW	28	7.7/2.1	H-34248-12
PTMA210452EL	1900-2200	I	45	28	10.5	3.2	WCDMA	28	3.5/1.3	H-33265-8
PTMA210452FL	1900-2200	I	45	28	10.5	3.2	WCDMA	28	3.5/1.3	H-34265-8

Packages for LDMOS RF Power Transistors and ICs

Molded Plastic



PG-DSO-20-63

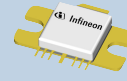


PG-RFP-10



(scale)

TEPAC - Open-Cavity Ceramic



H-33265-8



H-34265-8

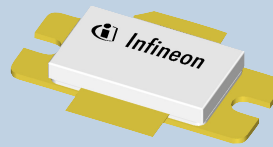
TEPAC - Thermally-Enhanced Open-Cavity Ceramic



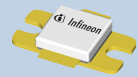
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H-33288-2



H-30260-2 / H-36260-2



H-30265-2



H-31248-2 / H-37248-2



H-34288-2



H-31260-2 / H-37260-2



H-31265-2

EPOC - Open Cavity Plastic



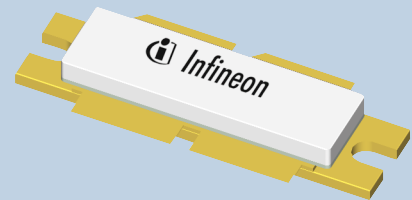
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PG-64248-2



H-32259-2



H-30275-4