



Freescale MRF7S24250N

250W high efficiency LDMOS transistor
@ 2.45 GHz

Release to market: February 2015



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MRF7S24250N: 250W LDMOS transistor in plastic



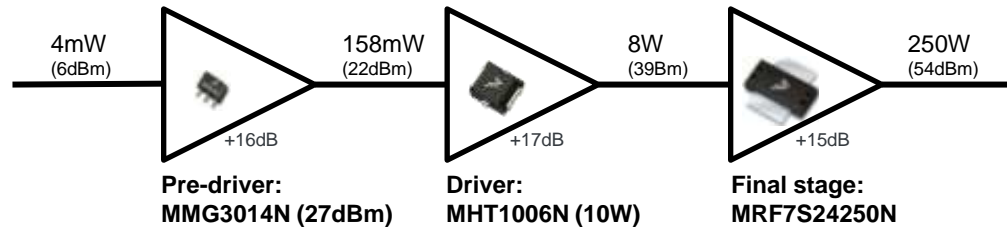
- Designed for 2.45GHz industrial applications such as industrial heating, welding, medical, plasma lighting
- 250W CW at 2.45 GHz
- Input and Output pre-matched
- Housed in OM-780 over-molded plastic package
- High ruggedness: 10:1 VSWR
- Product Longevity Program: warranted availability until 2025

Available Reference Circuits

Board Frequency (MHz)	Example of application	Power (W P1dB)	Gain (dB)	Drain Eff. (%)	Size
2450	Medical	250W CW	15	58	2x3" (5x7.6 cm)

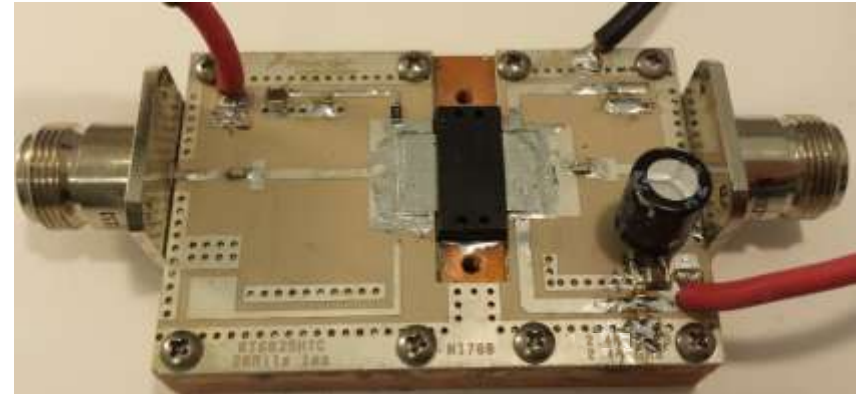


Line-up recommendation

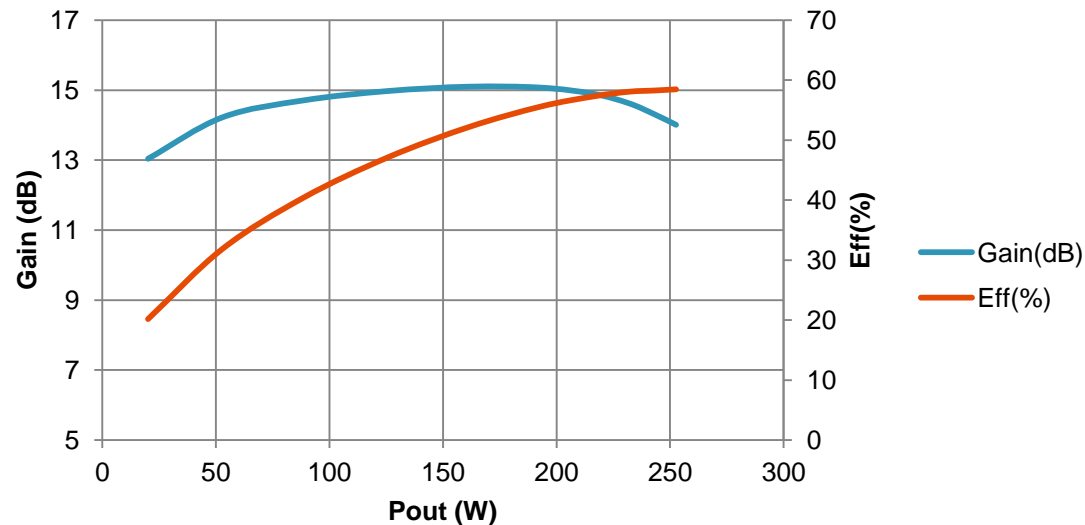


Reference circuit

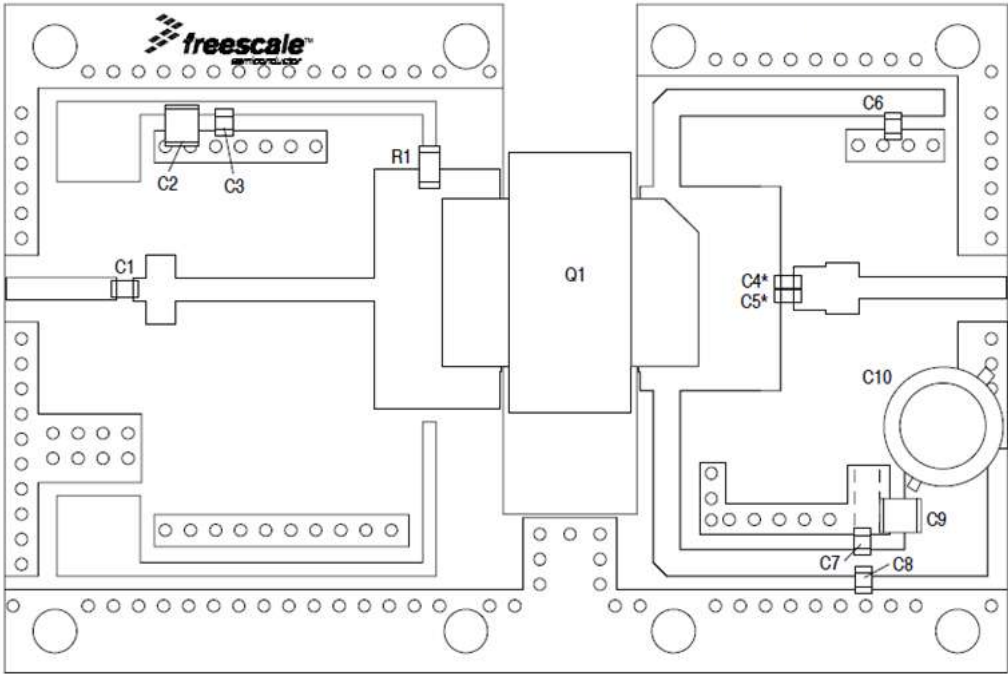
- Frequency: 2450MHz
- Drain voltage: 32V
- Gain: ≥ 15 dB
- Output Power: 250W
- Efficiency: 58%



Size: 2x3" (5x7.6 cm)



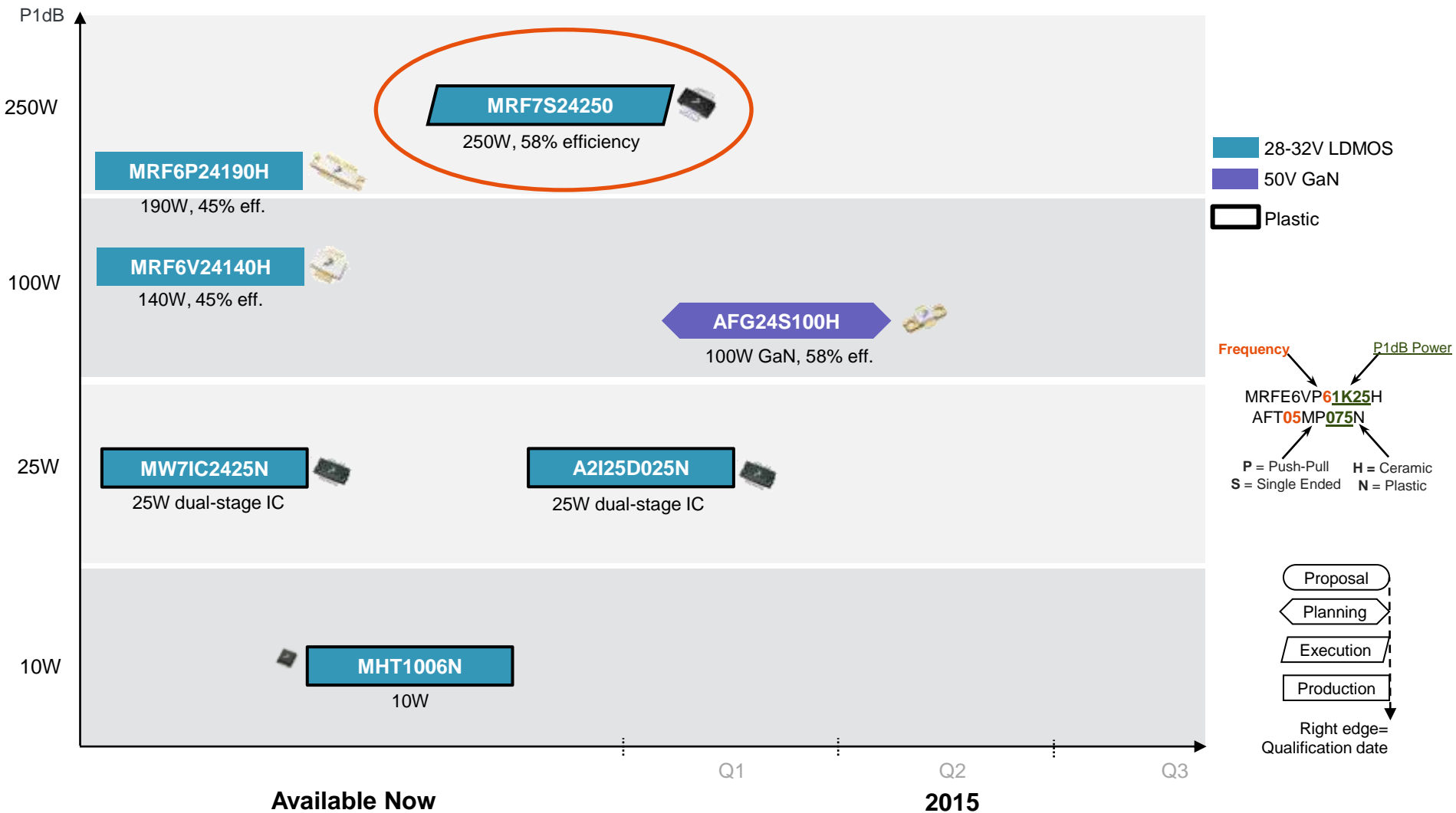
Layout & BOM



Part	Description	Part Number	Manufacturer
C1, C3, C4, C5, C6, C7, C8	27 pF Chip Capacitors	ATC600F270JT250XT	ATC
C2, C9	10 μ F Chip Capacitors	GRM32ER61H106KA12L	Murata
C10	220 μ F, 50 V Electrolytic Capacitor	227CKE050M	Illinois Capacitor
Q1	RF Power LDMOS Transistor	MRF7S24250N	Freescale
R1	10 Ω , 1/4 W Chip Resistor	CRCW120610R0FKEA	Vishay

Freescale 2.45 GHz portfolio

All watts are CW.





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