

TOSHIBA

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TIM1414-15-253**1. RF PERFORMANCE SPECIFICATIONS (Ta= 25°C)**

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power at 1dB Compression Point	P1dB(1)	VDS= 9V f=13.75GHz	40.0	40.5	—	dBm
Output Power at 1dB Compression Point	P1dB(2)	VDS= 9V f=14.0-14.5GHz	41.0	41.5	—	
Power Gain at 1dB Compression Point	G1dB	VDS= 9V	4.5	5.5	—	dB
Drain Current	IDS	f=13.75-14.5GHz	—	4.5	5.5	A
Power Added Efficiency	η_{add}		—	20	—	%

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2. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	gm	VDS= 3V IDS= 4.8A	—	3000	—	mS
Pinch-off Voltage	VGSoff	VDS= 3V IDS= 145mA	-1.5	-3.0	-4.5	V
Saturated Drain Current	IDSS	VDS= 3V VGS=0V	—	10.0	11.5	A
Gate-Source Breakdown Voltage	VGSO	IGS= -145 μ A	-5	—	—	V
Thermal Resistance	Rth(c-c)	Channel to Case	—	2.0	2.5	°C/W

Applications Engineering
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