

TOSHIBA

July 1997

TIM1414-7-253**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	37.0	38.0	—	dBm
Output Power at 1dB Compression Point	P1dB(2)	VDS= 9V f=14.0-14.5GHz	37.5	38.5	—	
Power Gain at 1dB Compression Point	G1dB	VDS= 9V	5.0	6.0	—	dB
Drain Current	IDS	f=13.75-14.5GHz	—	2.25	2.75	A
Power Added Efficiency	η_{add}		—	23	—	%

DataSheet4U.com

2. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	gm	VDS= 3V IDS= 2.4A	—	1500	—	mS
Pinch-off Voltage	VGSoff	VDS= 3V IDS= 72mA	-1.5	-3.0	-4.5	V
Saturated Drain Current	IDSS	VDS= 3V VGS=0V	—	5.0	5.7	A
Gate-Source Breakdown Voltage	VGSO	IGS= -72 μ A	-5	—	—	V
Thermal Resistance	Rth(c-c)	Channel to Case	—	3.0	3.7	°C/W

Applications Engineering
Solid-State Engineering Department
TOSHIBA CORPORATION, Komukai Works