

TIM7785-8SL-031**1. RF PERFORMANCE SPECIFICATIONS (Ta= 25 °C)**

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power at 1dB Compression Point	P1dB	VDS= 10V f=7.7-8.5GHz IDS=2.0A(Const)	38.5	39.5	—	dBm
Power Gain at 1dB Compression Point	G1dB		6.0	7.0	—	dB
3rd Order Intermodulation Distortion	IM3	NOTE	-42	-45	—	dBc
Channel Temperature Rise	ΔT_{ch}		—	—	80	°C

NOTE : Two Tone Test, Po= 28.5dBm (Single Carrier Level)

VDS= 10V, IDS=2.0A(Const)

2. ELECTRICAL CHARACTERISTICS (Ta= 25 °C)

CHARACTERISTICS	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Transconductance	gm	VDS= 3V IDS= 3.0A	—	1800	—	mS
Pinch-off Voltage	VGSoff	VDS= 3V IDS= 30mA	-1.0	-2.5	-4.0	V
Saturated Drain Current	IDSS	VDS= 3V VGS= 0V	—	5.2	7.0	A
Gate-Source Breakdown Voltage	VGSO	IGS= - 100 μ A	-5	—	—	V
Thermal Resistance	Rth(c-c)	Channel to Case	—	2.5	3.8	°C/W

Applications Engineering

Microwave Solid-State Department

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