

**TOSHIBA**

**MICROWAVE SEMICONDUCTOR  
TECHNICAL DATA**

**POWER GaAs MMIC**

**TMD0708-2**

Features:

- HIGH POWER  
P<sub>1dB</sub>= 33 dBm at 7.1 to 8.5 GHz
- BROAD BAND INTERNALLY MATCHED
- HIGH GAIN  
G<sub>1dB</sub>= 22 dB at 7.1 to 8.5 GHz
- HERMETICALLY SEALED PACKAGE

ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

CHARACTERISTICS	SYMBOL	UNIT	RATINGS
DRAIN SUPPLY VOLTAGE	VDD	V	15
GATE SUPPLY VOLTAGE	VGG	V	-10
INPUT POWER	P <sub>in</sub>	W	0.1
FLANGE TEMPERATURE	T <sub>f</sub>	°C	-30~+80
STORAGE TEMPERATURE	T <sub>stg</sub>	°C	-65~+175

RF CHARACTERISTICS (T<sub>a</sub>=25°C)

CHARACTERISTICS	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power at 1 dB Gain Compression Point	P <sub>1dB</sub>	VDD1=VDD2=VDD3=10V,	dBm	32.0	33.0	—
Power Gain at 1 dB Gain Compression Point	G <sub>1dB</sub>	VGG=-5 V f= 7.1-8.5 GHz	dB	20.0	22.0	—
Drain Current	I <sub>DD</sub> *		A	—	1.70	2.00
Input VSWR	VSWR <sub>i</sub>		—	—	—	3.0

\* I<sub>DD</sub>=I<sub>DD1</sub>+I<sub>DD2</sub>+I<sub>DD3</sub>

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