

TOSHIBA

MICROWAVE SEMICONDUCTOR TECHNICAL DATA

POWER GaAs MMIC

S9750

PRELIMINARY

FEATURES :

- HIGH POWER
 $P_o = 28 \text{ dBm}$ @ $P_{in} = 8 \text{ dBm}$
- HIGH GAIN
 $G_p = 20 \text{ dB}$ @ $P_{in} = 8 \text{ dBm}$
- SUPER LOW DISTORTION
 $P_{adj} = -65 \text{ dBc}$
@ $P_o = 27 \text{ dBm}$, 600 kHz offset
- INPUT/OUTPUT PORT MATCHED TO 50 Ω
- HERMETICALLY SEALED PACKAGE

RF PERFORMANCE SPECIFICATIONS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	CONDITION	UNIT	MIN.	TYP.	MAX.
Output Power	P_o	$V_{DD1} = V_{DD2} = 6\text{V}$ $V_{GG} = -5\text{V}$, $f = 1.9 \text{ GHz}$ $P_{in} = 8 \text{ dBm}$	dBm	27	28	-
Power Gain	G_p		dB	19	20	-
Drain Current	I_{DD}^*		mA	-	360	500
Adjacent Channel Leakage Power	P_{adj}	$V_{DD1} = V_{DD2} = 6\text{V}$ $V_{GG} = -5\text{V}$, $f = 1.9 \text{ GHz}$ $P_o = 27 \text{ dBm}$ $\pi/4$ -QPSK Modulation 600kHz Offset	dBc	-	-65	-

* $I_{DD} = I_{DD1} + I_{DD2}$

- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA for any infringements of patents or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of TOSHIBA or others.
- The information contained herein may be changed without prior notice. It is therefore advisable to contact TOSHIBA before proceeding with the design of equipment incorporating this product.

TOSHIBA CORPORATION

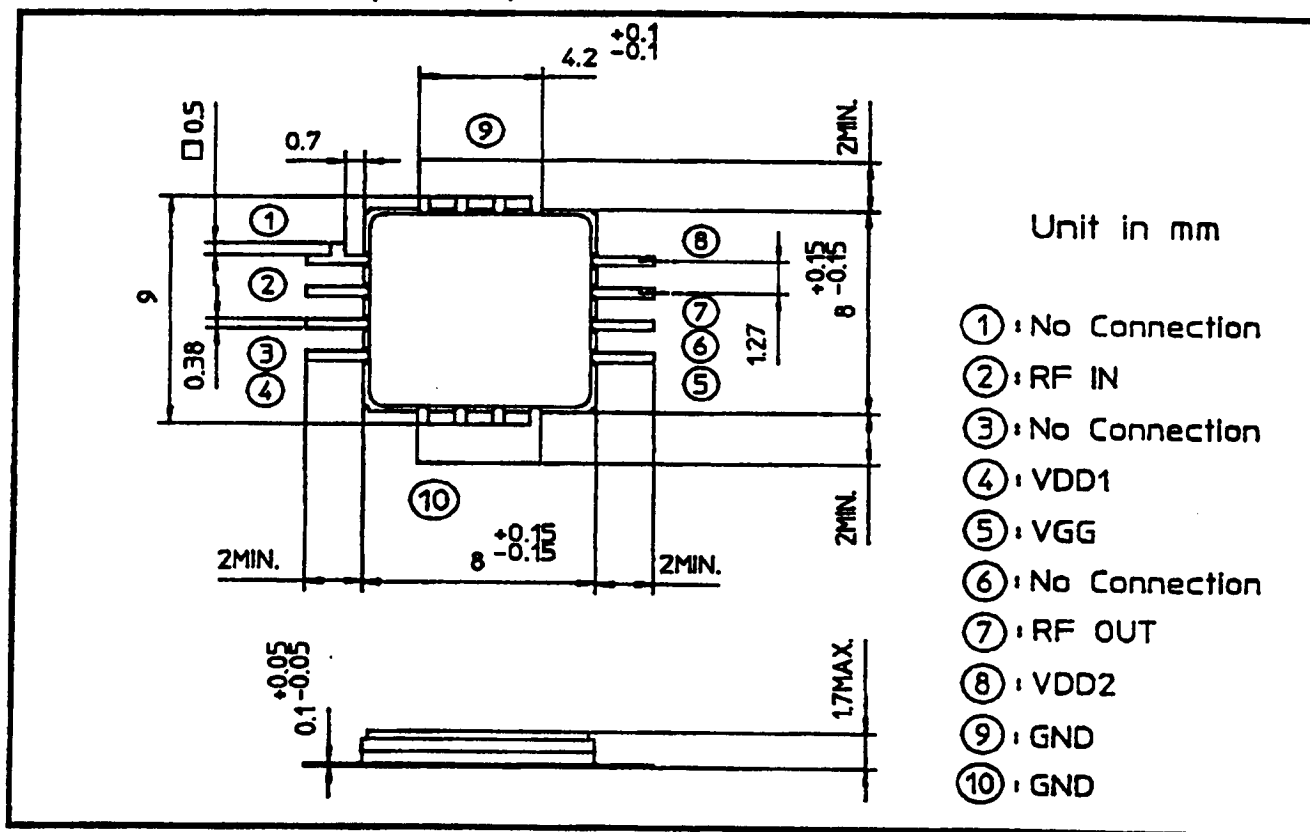
Revised Aug. 1996

S9750

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	UNIT	RATING
Drain Supply Voltage	VDD1, VDD2	V	15
Gate Supply Voltage	VGG	V	-15
Input Power	P _{in}	dBm	13
Flange Temperature	T _f	°C	-30~+80
Storage Temperature	T _{stg}	°C	-65~+175

PACKAGE OUTLINE (2-8P1A)



HANDLING PRECAUTIONS FOR PACKAGED TYPE

Soldering iron should be grounded and the operating time should not exceed 10 seconds at 260 °C.