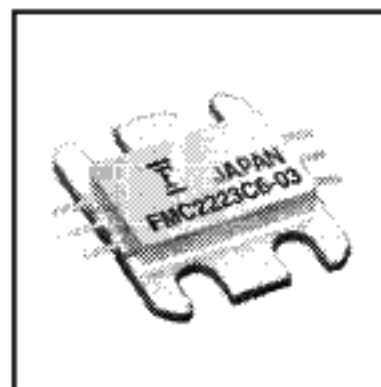


FEATURES

- High Output Power: $P_{1dB} = 18\text{dBm(Typ.)}$
- High Gain: $G_{1dB} = 13\text{dB(Typ.)}$
- Low In/Out VSWR
- Broad Band: 22.4 ~ 23.6GHz
- Impedance Matched $Z_{in}/Z_{out} = 50\Omega$
- Hermetically Sealed Package (12 X 15 X 3.5mm)

**DESCRIPTION**

The FMC2223C6-03 is a module that contains a two-stage amplifier, internally matched, for standard communications in the 22.4 to 23.6GHz frequency range. This product is well suited for point-to-point radio applications as it offers high power, high gain, and low VSWR.

Fujitsu's stringent Quality Assurance Program assures the highest reliability and consistent performance.

ABSOLUTE MAXIMUM RATINGS (Ambient Temperature $T_a = 25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
DC Input Voltage	V_{DD}	10	V
DC Input Voltage	V_{GG}	-7	V
Input Power	P_{in}	8.5	dBm
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$
Operating Case Temperature	T_{op}	-55 to +85	$^\circ\text{C}$

Fujitsu recommends the following conditions for the reliable operation of GaAs modules:

1. The drain operating voltage (V_{DD}) should not exceed 8 volts.
2. The gate operating voltage (V_{GG}) should not exceed -5 volts.

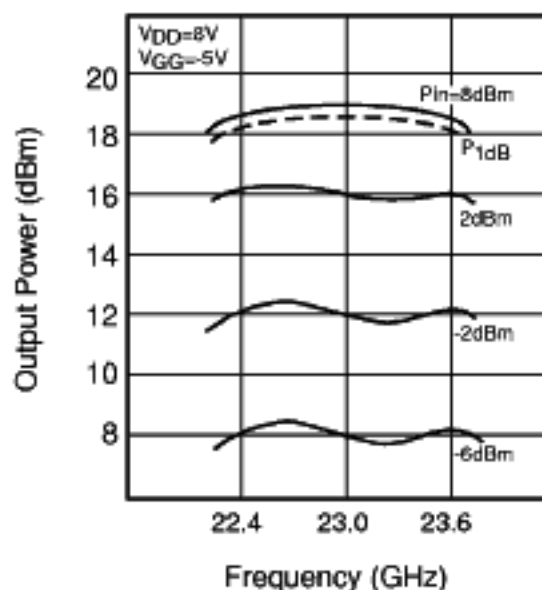
ELECTRICAL CHARACTERISTICS (Case Temperature $T_c = 25^\circ\text{C}$)

Item	Symbol	Test Conditions	Limit			Unit
			Min.	Typ.	Max.	
Frequency Range	f		22.4 ~ 23.6			GHz
Output Power at 1dB G.C.P.	P_{1dB}	$V_{DD} = 8\text{V}$ $V_{GG} = -5\text{V}$	16.5	18.0	-	dBm
Power Gain at 1 dB G.C.P.	G_{1dB}	$f = 22.4 \sim 23.6\text{GHz}$	11.0	13.0	16.0	dB
Gain Flatness	ΔG	$V_{DD} = 8\text{V}$ $V_{GG} = -5\text{V}$	-	1.0	2.0	dB
Input VSWR	$VSWR_i$	$P_{in} = -5\text{dBm}$	-	2.5:1	3.0:1	-
Output VSWR	$VSWR_o$	$f = 22.4 \sim 23.6\text{GHz}$	-	3.0:1	4.0:1	-
DC Input Current	I_D	$V_{DD} = 8\text{V}$	-	70	100	mA
DC Input Current	I_G	$V_{GG} = -5\text{V}$	-	10	15	mA

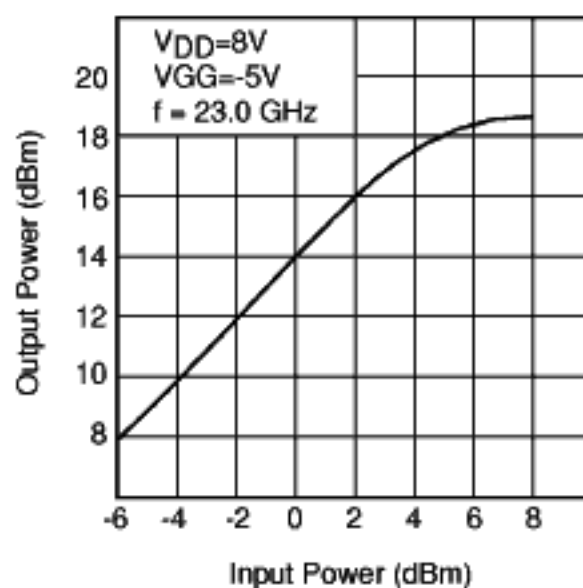
CASE STYLE: GJ

G.C.P.: Gain Compression Point

OUTPUT POWER vs. FREQUENCY



OUTPUT POWER vs. INPUT POWER



2

Case Style "GJ"

Metal-Ceramic Hermetic Package

