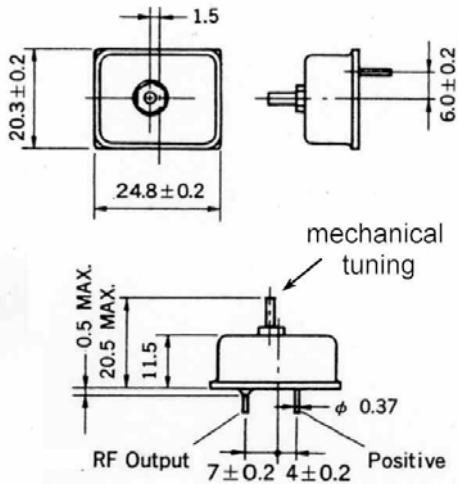


# MC-5808 J 11.3 GHz DR OSCILLATOR

**PACKAGE DIMENSIONS** (Unit : mm)



**DESCRIPTION**

The MC-5808 series is a GaAs FET Dielectric Resonator Oscillator (DRO) with high output power and frequency stability.

**FEATURES**

- High output power: +10 dBm MIN.
- High frequency stability
- Output power impedance matched to 50 Ω

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

Supply Voltage	V <sub>DD</sub>	10	V
Operating Temperature	T <sub>opt</sub>	-50 to +75	°C
Storage Temperature	T <sub>stg</sub>	-60 to +85	°C

**Frequency:**  
11.3 GHz

**Tuning:**  
0 / + 250 MHz

**Output:**  
10 mW ( a 11.3 GHz )

**Power supply:**  
+ 8 Vdc / 85 mA

**ELECTRICAL CHARACTERISTICS** (T<sub>a</sub> = 25±3 °C, RH ≤ 70 %, Z<sub>S</sub> = Z<sub>L</sub> 50 Ω)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Supply Voltage	V <sub>DD</sub>		8.0		V	
Operating Current	I <sub>DD</sub>		70	85	mA	
Output Power	P <sub>o</sub>	10	15		mW	
Power Stability	ΔP <sub>o</sub>			±1.0	dB	T <sub>a</sub> = -40 °C to +50 °C
Oscillation Frequency	f <sub>o</sub>			±1.0	MHz	V <sub>DD</sub> = 8 V, Center frequency
Frequency Stability	Δf <sub>o</sub>		±0.7	±1.0	MHz	T <sub>a</sub> = -40 to +50 °C
f <sub>o</sub> Pushing Factor	Δf <sub>o</sub> /ΔV			1.5	MHz/V	
f <sub>o</sub> Pulling Factor	Δf <sub>o</sub>			2.0	MHz	VSWR = 1.5