

# 512C-x Series

## VCXO RF Driver (Preliminary)



0708

The 512C series tuneable drivers are designed to operate with Isomet 80MHz AO frequency shifters.

Contained in these Drivers is a voltage controlled crystal oscillator, a wideband balanced diode ring mixer, and RF power amplifier. The high speed, diode ring mixer is included to allow modulation of the RF amplitude under the control of the video input. A modulation enable switch selects this option. The resulting AM signal is subsequently amplified by a Class A MOSFET power amplifier.

Efficient heat transfer from the driver is required. The mounting base must be attached to an external heat sink not exceeding a temperature of 60°C. The supply to the 532C-2 driver is internally regulated and thus will accept a wide DC power input range. The DC input is not internally regulated on C-L, C-4 and C-7 variants.

### SPECIFICATIONS

Output impedance:	50Ω Nominal
Load Mismatch VSWR:	2:1 Max
Frequency:	80.000 MHz
Frequency Accuracy:	± 25ppm
Frequency Pull range:	± 50ppm (± 4KHz)
Tuning control voltage:	+0.3V to +3.00V full range
Tuning linearity:	10% max, 6% typical
Modulation Input:	0 - 1V * for 100% depth of modulation
RF On-Off Ratio:	50 ohm input impedance >40dB
DC Power Input:	512C-L +15Vdc regulated to ± 1%, < 400mA
	512C-2 +22 to +30Vdc regulated to ± 1%, < 500mA
	512C-4 +24/+28Vdc regulated to ± 1%, < 500mA
	512C-7 +24/+28Vdc regulated to ± 1%, < 800mA
Temperature Range:	0°C to 60°C ambient, temperature at mounting face must not exceed 60°C.
Mounting Orientation:	Any
Dimensions:	See Outline, reverse side.

### PERFORMANCE

Model	Centre Frequency	Minimum Rise Time	RF Drive Power	Supply
512C-L	80MHz	6nsec	>1.7 W	+15V
512C-2	80MHz	6nsec	>2.8 W	+22 to +30V
512C-4	80MHz	6nsec	>3.5 W	+24V
512C-7	80MHz	6nsec	>7.0 W	+24V

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

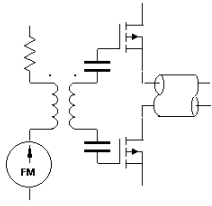
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**Quality Assured.**

**In-house: RF & Digital design  
Software Development  
OEM manufacture**



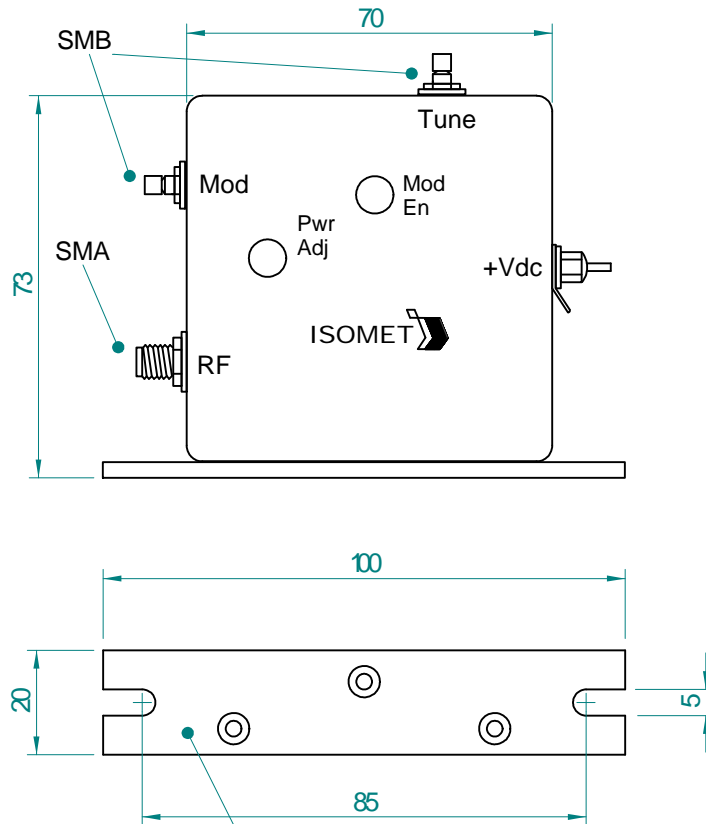
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### OUTLINE DRAWING



Mounting Flange to Heatsink  
Apply Thermal Compound  
Max. Temp 60deg C

Dim'n : mm

#### \* Options

#### Add Suffix

0-5V modulation	:	'-V'
0-10V modulation	:	'-X'

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