

# 525C-175 Series

## RF Driver



The 525C-175 RF Driver is designed to operate with Isomet 175MHz AO modulators and frequency shifters. This driver allows proportional (analog) control of laser beam intensity.

Contained in these Drivers are a SAW resonator, a wideband mixer, and a RF Power amplifier. A high speed, balanced ring modulator is used to switch the carrier amplitude under the control of the modulation input. The resulting double sideband AM signal is subsequently amplified by a Class A MOSFET amplifier stage.

Efficient heat transfer from the driver requires that the mounting base be attached to an external heat sink not exceeding 60°C in temperature.

### SPECIFICATIONS

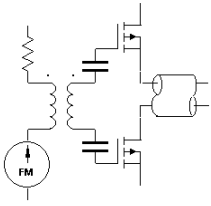
Output impedance:	50Ω Nominal
Load Mismatch VSWR:	2:1 Max
RF On-Off Ratio:	>40dB
Digital Input:	TTL compatible > 2.7V = RF ON, < 0.8V = RF OFF (10mA input current)
Frequency Accuracy:	± 0.003%
Frequency Stability:	± 0.003%
DC Power Input:	+24Vdc regulated to ± 1% < 500mA
Temperature Range:	0°C to 60°C ambient, temperature at mounting face must not exceed 60°C.
Mounting Orientation:	Any
Dimensions:	See Outline, reverse side.

### PERFORMANCE

<u>Centre Frequency</u>	<u>Minimum Rise Time</u>	<u>RF Drive Power</u>
175MHz	3nsec	>2.5 W

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
 ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.  
 Tel: (703) 321 8301 Fax: (703) 321 8546  
 E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

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

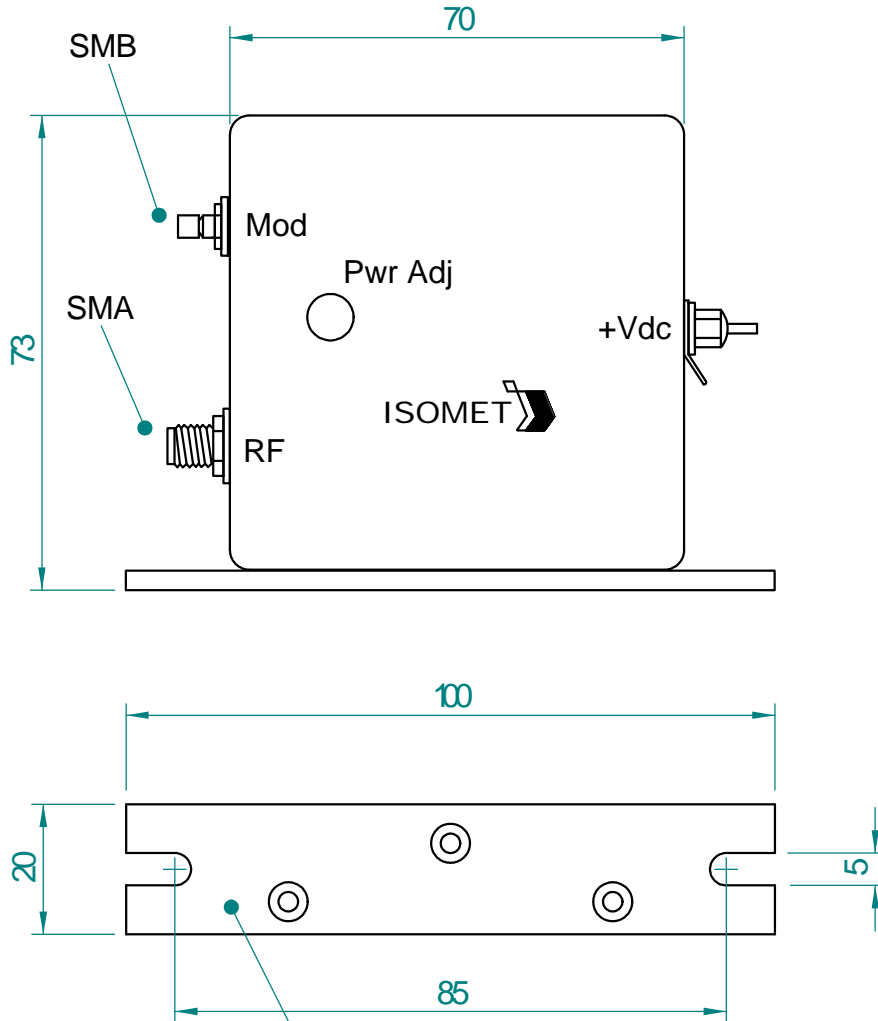


# 525C-175 Series RF Driver



206

## OUTLINE DRAWING



Mounting Flange to Heatsink  
Apply Thermal Compound  
Max. Temp 70deg C

Dim'n : mm

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: RF & Digital design**

**Software Development**

**OEM manufacture**