

# 535C-175 Series

## RF Driver



The 535C-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. Under control of the video input signal, the mixer impresses the modulating video on the carrier amplitude. The resulting double sideband AM signal is subsequently amplified by the Class A MOSFET amplifier.

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  |
| Analogue Input:       | 0 - 1V for 100% depth of modulation<br>50 ohm input impedance              |
| Frequency Accuracy:   | ± 0.003%   |
| Frequency Stability:  | ± 0.003%   |
| DC Power Input:       | +24Vdc regulated to ± 1%<br>< 500mA  |
| Temperature Range:    | 0°C to 60°C ambient, temperature at<br>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**

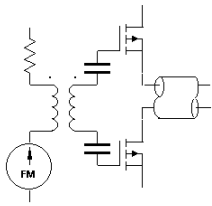
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**Quality Assured.**

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

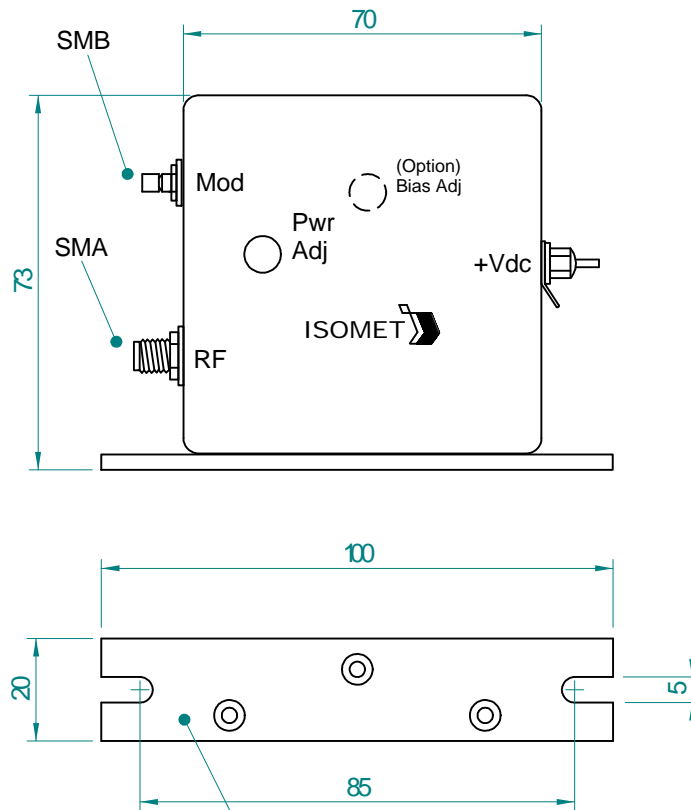


# 535C-175 Series RF Driver



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## OUTLINE DRAWING



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

Dim'n : mm

### \* Options

### Add Suffix

|                  |   |      |
|------------------|---|------|
| Input BIAS       | : | '-B' |
| 0-5V modulation  | : | '-V' |
| 0-10V modulation | : | '-X' |

(TTL compatible = 525C-175 series)

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