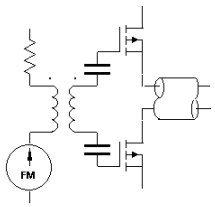



# 521C-x-27 Series

## RF Driver

ISOMET

*1106*

The 521C-x-27 series RF Drivers are designed to operate with Isomet 27MHz modulators and compact Q-switches. This driver allows digital (On:Off) control of laser beam intensity.

Contained in these Drivers is a crystal oscillator, a wideband balanced diode ring modulator, and 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 is required. The mounting base must be attached to an external heat sink not exceeding a temperature of 70ºC. The supply to the 521C-2-27 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-6 variants.

### SPECIFICATIONS

| | | |
|---|---|---|
| Output impedance: | | 50Ω Nominal |
| Load Mismatch VSWR: | | 2:1 Max |
| RF On-Off Ratio: | | >40dB |
| Digital Input: | | TTL compatible<br>> 2.7V = RF ON, < 0.8V = RF OFF<br>(10mA input current) |
| Frequency Accuracy: | | ± 0.003% |
| Frequency Stability: | | ± 0.003% |
| DC Power Input: | 521C-L-27 | +15Vdc regulated to ± 1%, < 400mA |
| | 521C-2-27 | +22 to +30Vdc regulated to ± 1%, < 500mA |
| | 521C-4-27 | +24/+28Vdc regulated to ± 1%, < 500mA |
| | 521C-6-27 | +24/+28Vdc regulated to ± 1%, < 700mA |
| Temperature Range: | | 0°C to 60°C ambient, temperature at mounting face must not exceed 70°C. |
| Mounting Orientation: | | Any |
| Dimensions: | | See Outline, reverse side. |

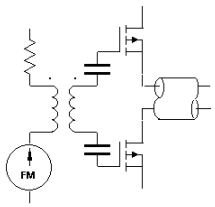
### PERFORMANCE

| Model | Centre Frequency | Minimum Rise Time | RF Drive Power | Supply |
|---|---|---|---|---|
| 521C-L-27 | 27MHz | 10nsec | >1.5 W | +15V |
| 521C-2-27 | 27MHz | 10nsec | >3.0 W | +22 to +30V |
| 521C-4-27 | 27MHz | 10nsec | >3.6 W | +24V |
| 531C-6-27 | 27MHz | 10nsec | >6.0 W | +24V |

**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*** ***Web Page: WWW.ISOMET.COM***

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

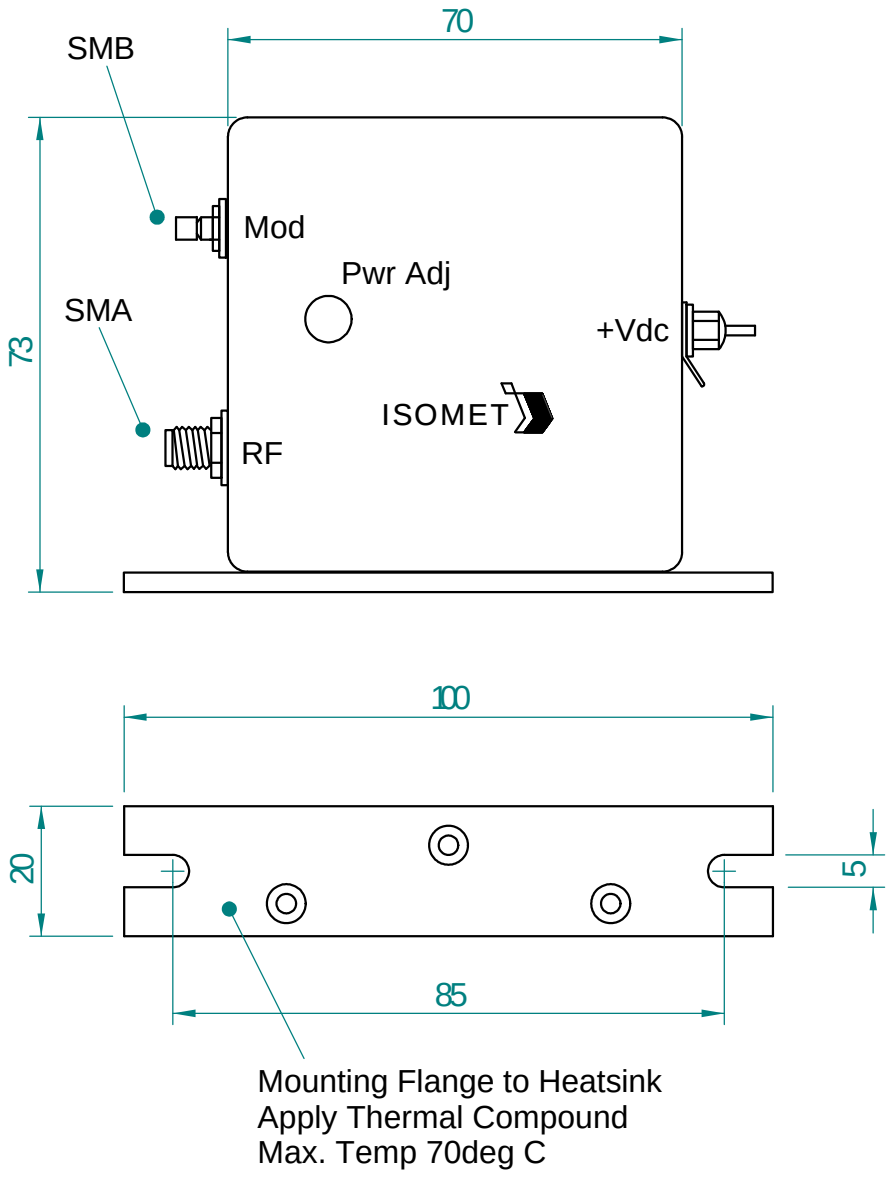


# 521C-x-27 Series

## RF Driver

*1106*

**OUTLINE DRAWING**




Dimensions : mm

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