

523C-x Series RF Driver



1106

The 523C series Digital Modulation Drivers are designed to operate with Isomet 110MHz AO modulators and frequency shifters for digital (On:Off) control of the 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 70°C. The supply to the 523C-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-6 variants.

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: 523C-L	+15Vdc regulated to ± 1%, < 400mA
523C-2	+22 to +30Vdc regulated to ± 1%, < 500mA
523C-4	+24/+28Vdc regulated to ± 1%, < 500mA
523C-6	+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

<u>Model</u>	<u>Centre Frequency</u>	<u>Minimum Rise Time</u>	<u>RF Drive Power</u>	<u>Supply</u>
523C-L	110MHz	6nsec	>1.5 W	+15V
523C-2	110MHz	6nsec	>2.0 W	+22 to +30V
523C-3	110MHz	6nsec	>2.5 W	+24V
523C-6	110MHz	6nsec	>5.5 W	+28V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

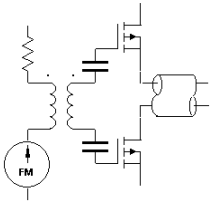
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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

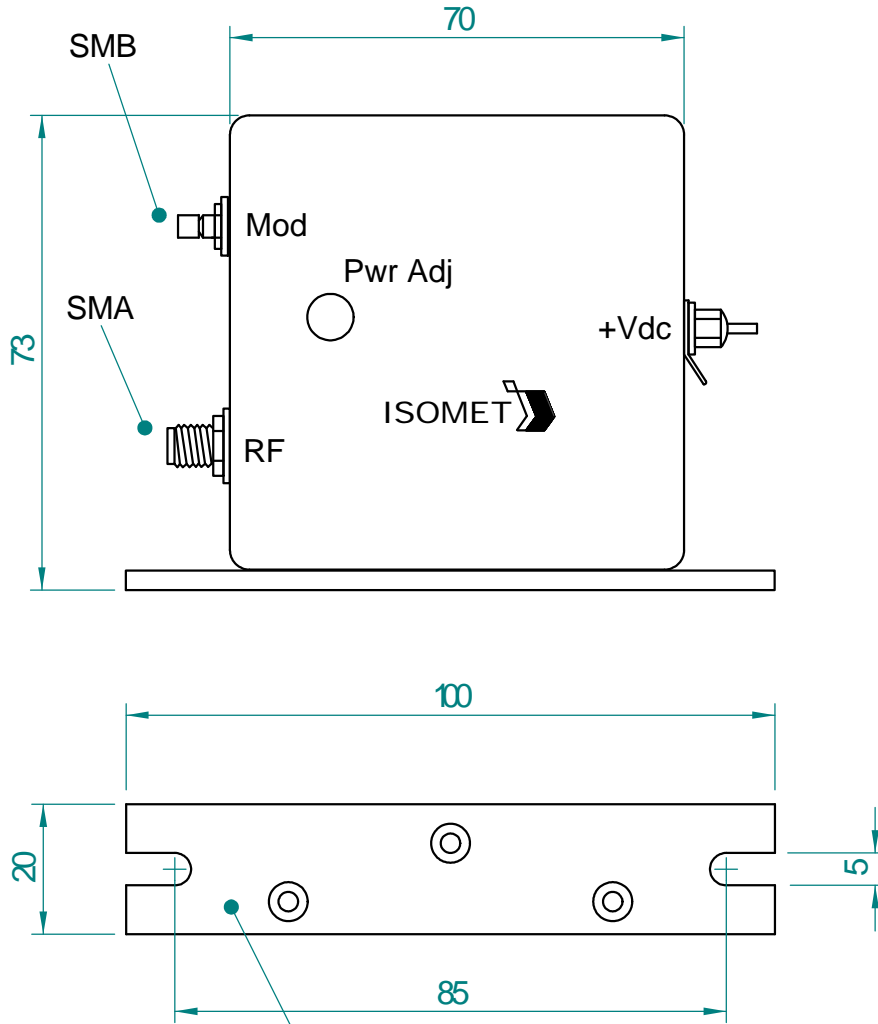


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OUTLINE DRAWING



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

Dimensions : mm

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Software Development
OEM manufacture