

521C-x-45 Series

RF Driver



1106

The 521C-45 series Digital Modulation Drivers are designed to operate with Isomet 45MHz AO modulators and Signal Processor cells. 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 70°C. The supply to the 521C-2-45 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: 521C-L-45	+15Vdc regulated to ± 1%, < 400mA
521C-2-45	+22 to +30Vdc regulated to ± 1%, < 500mA
521C-4-45	+24/+28Vdc 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

Model	Centre Frequency	Minimum Rise Time	RF Drive Power	Supply
521C-L-45	45MHz	6nsec	>1.7 W	+15V
521C-2-45	45MHz	6nsec	>3.0 W	+22 to +30V
521C-4-45	45MHz	6nsec	>3.6 W	+24V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

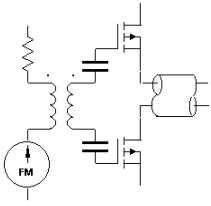
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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

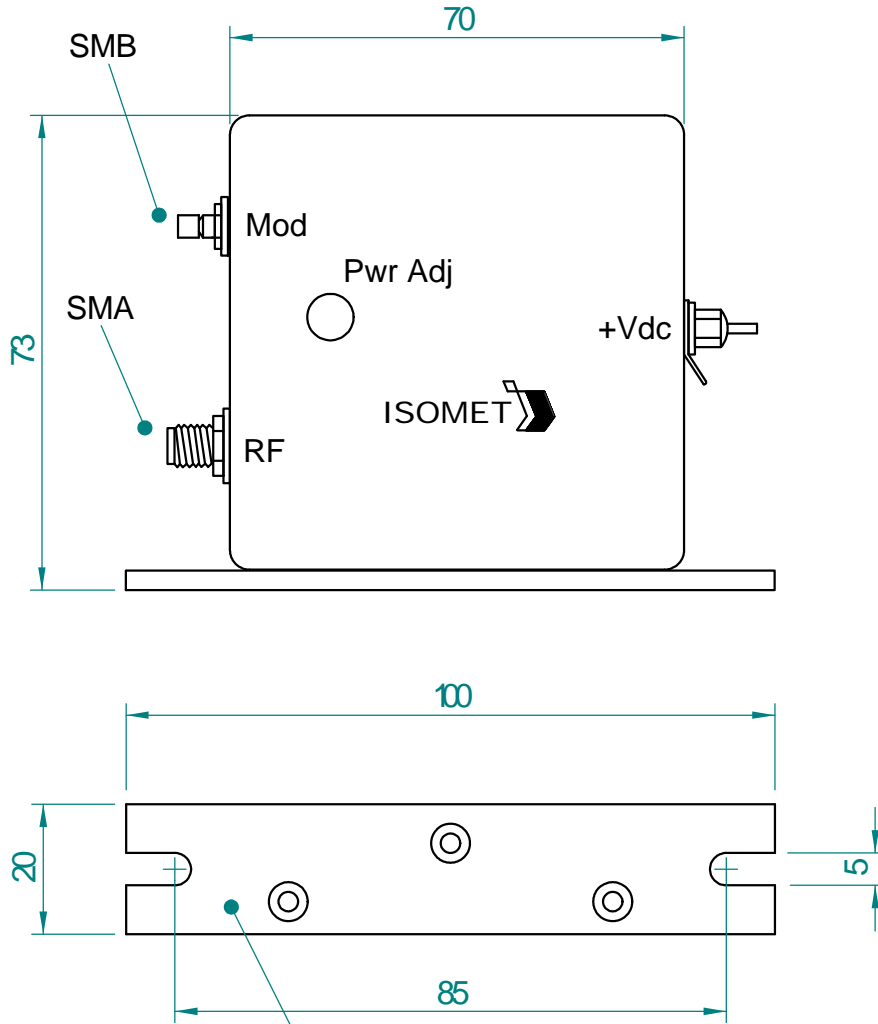


521C-x-45 Series RF Driver



1106

OUTLINE DRAWING



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

Dimensions : 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 Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture