

531C-x-45 Series

RF Driver



1106

The 531C-45 series RF Drivers are designed to operate with Isomet 45MHz AO modulators and Signal Processor cells. This driver allows proportional (analog) 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 modulate the carrier amplitude under the control of the video input. The resulting double sideband AM signal is subsequently amplified by a Class A MOSFET amplifier.

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 531C-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:	>37dB
Analogue Input:	0 - 1V * for 100% depth of modulation 50 ohm input impedance
Frequency Accuracy:	± 0.003%
Frequency Stability:	± 0.003%
DC Power Input: 531C-L-45	+15Vdc regulated to ± 1%, < 400mA
531C-2-45	+22 to +30Vdc regulated to ± 1%, < 500mA
531C-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
531C-L-45	45MHz	10nsec	>1.7 W	+15V
531C-2-45	45MHz	10nsec	>3.0 W	+22 to +30V
531C-4-45	45MHz	10nsec	>3.6 W	+24V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

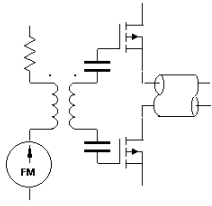
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Quality Assured.

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

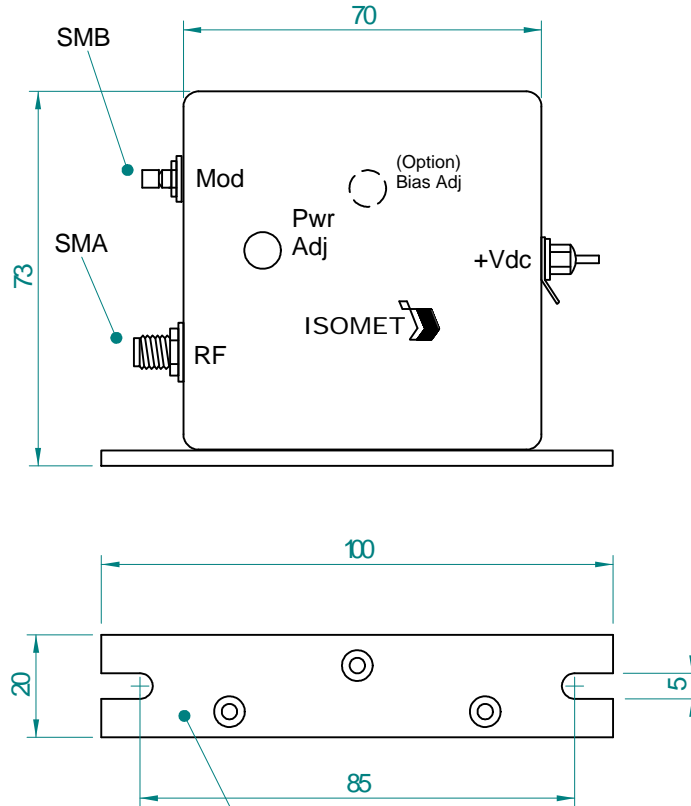


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OUTLINE DRAWING



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

Dim'n : mm

* Options

Add Suffix

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

(TTL compatible = 521C-45 series)

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