

533C-x Series

RF Driver



0115

The 533C series RF Drivers are designed to operate with Isomet 110MHz AO modulators and compact Q-switches for the proportional (analog) control of laser beam intensity.

The driver includes a crystal oscillator, a wideband balanced diode mixer and RF power amplifier. The mixer is used to modulate the carrier amplitude under the control of the external modulation input. The resulting double sideband AM signal is subsequently amplified by a Class A MOSFET 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 533C-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
Analogue Input:	0 - 1V * for 100% depth of modulation 50 ohm input impedance
Frequency Accuracy:	± 25ppm
Frequency Stability:	± 25ppm
DC Power Input: 533C-L	+15Vdc regulated to ± 1%, < 400mA
533C-2	+22 to +30Vdc regulated to ± 1%, < 500mA
533C-4	+24/+28Vdc regulated to ± 1%, < 500mA
533C-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

PERFORMANCE

Model	Centre Frequency	Minimum Rise Time	RF Drive Power	Supply
533C-L	110MHz	6nsec	>1.5 W	+15V
533C-2	110MHz	6nsec	>2.0 W	+22 to +30V
533C-3	110MHz	6nsec	>2.5 W	+24V
533C-6	110MHz	6nsec	>5.5 W	+24V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

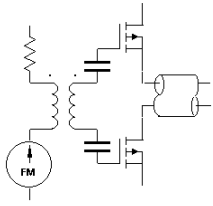
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Quality Assured.

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

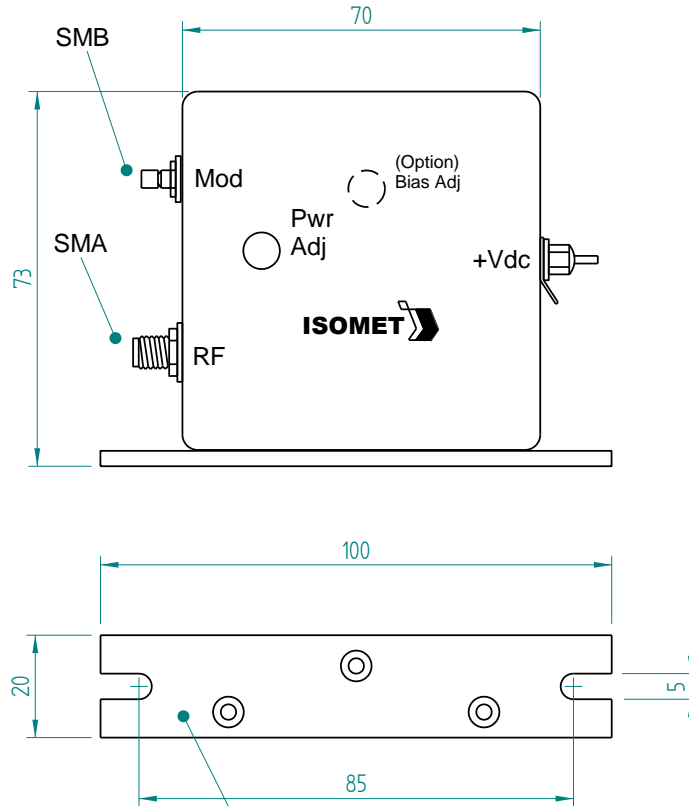


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OUTLINE DRAWING



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 = 523C series)

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