

# 534C-x Series RF Driver



1106

The 534C series RF Drivers are designed to operate with Isomet 150MHz AO modulators and compact Q-switches for the 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 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 534C-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 and C-3 variants.

## **SPECIFICATIONS**

 $\begin{array}{lll} \mbox{Output impedance:} & 50\Omega \mbox{ Nominal} \\ \mbox{Load Mismatch VSWR:} & 2:1 \mbox{ Max} \\ \mbox{RF On-Off Ratio:} & >40 \mbox{dB} \\ \end{array}$ 

Analogue Input: 0 - 1V \* for 100% depth of modulation

50 ohm input impedance

Frequency Accuracy:  $\pm 0.003\%$ Frequency Stability:  $\pm 0.003\%$ 

DC Power Input: 534C-L +15Vdc regulated to  $\pm$  1%, < 400mA

534C-2 +22 to +30Vdc regulated to  $\pm$  1%, < 500mA +24/+28Vdc regulated to  $\pm$  1%, < 550mA

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>	Centre <u>Frequency</u>	Minimum <u>Rise Time</u>	RF Drive <u>Power</u>	<u>Supply</u>
534C-L	150MHz	6nsec	>1.5 W	+15V
534C-2	150MHz	6nsec	>2.4 W	+22 to +30V
534C-3	150MHz	6nsec	>3.0 W	+24V
534C-3	150MHz	6nsec	>3.3 W	+28V

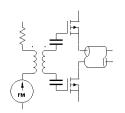
#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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

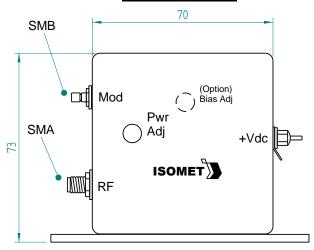


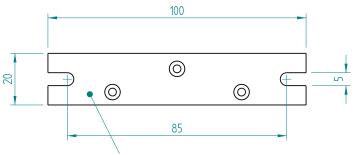
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# **OUTLINE DRAWING**





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 = 524C series)

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