| | 525C-x | ISOMET |
|--|-----------|--------|
| | RF Driver | 1106 |

The 525C series Digital Modulation Drivers are designed to operate with Isomet 200MHz high speed AO modulators and frequency shifters for digital (On:Off) control of the laser beam intensity.

Contained in these Drivers are a SAW resonator, a wideband mixer, and a 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 requires that the mounting base be attached to an external heat sink not exceeding 60°C in temperature. The supply to the 525C-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 variant.

SPECIFICATIONS

 50Ω Nominal

TTL compatible

(10mA input current)

2:1 Max

>40dB

± 0.01%

± 0.01%

Output impedance: Load Mismatch VSWR:

RF On-Off Ratio:

Digital Input:

Frequency Accuracy: Frequency Stability:

DC Power Input: 525C-L 525C-2

Temperature Range:

Mounting Orientation: Dimensions: mounting face must not exceed 70°C.

> 2.7V = RF ON, < 0.8V = RF OFF

+9Vdc regulated to \pm 1%, < 250mA

0°C to 60°C ambient, temperature at

+22 to +30Vdc regulated to \pm 1%, < 500mA

See Outline, reverse side.

PERFORMANCE

| Model | Centre Frequency | Minimum <u>Rise Time</u> | RF Drive <u>Power</u> | Supply |
|--------|---------------------|-----------------------------|--------------------------|-------------|
| 525C-L | 200MHz | 3nsec | >0.45 W | +9V |
| 525C-2 | 200MHz | 3nsec | >2.0 W | +22 to +30V |

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICEISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.Tel: (703) 321 8301Fax: (703) 321 8546E-mail: ISOMET@ ISOMET.COMWeb Page: WWW.ISOMET.COM

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

