

## AOM Driver

**A 027**

With the A 027 Landwehr offers a quartz stabilized oscillator driver for use in applications with standard acousto-optic modulators, fibre coupled frequency shifter or fibre coupled modulator devices. The A 027 is an ideal type of high power driver which allows analogue modulation. High technical performance guarantees wide modulation bandwidth, excellent transfer characteristic and good on/off ratio.

This AOM driver A 027 is designed for industrial applications as well as for university research.



## Technical Data

|                              |   |
|------------------------------|---|
| Oscillator frequency         | 110 MHz $\pm$ 0.1 %, quartz stabilized  |
| Frequency drift              | $\Delta f / ^\circ\text{C} < \pm 30$ ppm  |
| Output frequency of driver   | $f_0 = 110$ MHz   |
| Spectral purity              | $< -60$ dBc @ $f_0 \pm 100$ MHz   |
| Harmonics                    | $< -18$ dBc @ $2f_0, 3f_0, \dots$   |
| Analogue video input voltage | 0 ... +1 volt into 50 $\Omega$<br>• logic $\downarrow 0 \downarrow = 0$ V    rf power off<br>• logic $\uparrow 1 \uparrow = 1$ V    rf power on |
| RF on-/off-ratio analogue    | $> 35$ dB at any output level   |
| RF switch-on/switch-off time | $< 12$ nsec @ $P_{\text{RF}}: 10 \dots 90$ %  |

|                       |  |
|-----------------------|--|
| RF output power level | < 24 ... > 35.2 dBm @ 50 Ω and U <sub>S</sub> = 24 V<br>< 25 ... > 36.1 dBm @ 50 Ω and U <sub>S</sub> = 28 V           |
|                       | amplifier is protected against<br>load mismatch  |
| RF output stability   | warm-up time (10 min) <± 5 %<br>after warm-up time <± 1 %  |
| Supply voltage        | U <sub>S</sub> = 24 V or 28 V  |
| Supply current        | I <sub>S</sub> = 1000 mA ± 100 mA @ U <sub>S</sub> = 24 V<br>I <sub>S</sub> = 1250 mA ± 100 mA @ U <sub>S</sub> = 28 V |

## Absolute Maximum Ratings

|                             |  |
|-----------------------------|--|
| Supply voltage output stage | +28.7 V  |
| Power output                | no DC-feedback allowed   |
| Case temperature            | +55 °C • the driver must be mounted<br>on an adequate heatsink |

## Quality Standards

|                 |                                       |
|-----------------|---------------------------------------|
| EMC-standards   | VDE 0871 - B<br>FCC Rules Part 15 - B |
| Functional test | 100 %                                 |
| Burn-in test    | passive 2 h<br>active ½ h             |

## Connectors and Mechanics

|                      |                        |
|----------------------|------------------------|
| RF-Connector         | SMA female             |
| Analogue video input | BNC female             |
| Dimensions           | 150 mm x 70 mm x 64 mm |
| Mounting plate       | 150 mm x 70 mm         |