

AOM Driver

A 103

With the A 103 Landwehr offers a quartz stabilized oscillator driver for acousto-optic modulator (AOM) applications. The A 103 is a new type of power driver which is designed for digital modulation. High technical performance guarantees wide modulation bandwidth, excellent switching and unique on/off ratio.

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



Technical Data

Oscillator frequency	80 MHz \pm 0.1 %, quartz stabilized
Frequency drift	$\Delta f / ^\circ\text{C} < \pm 30$ ppm
Output frequency of driver	$f_0 = 80$ MHz
Spectral purity	< -60 dBc @ $f_0 \pm 75$ MHz
Harmonics	< -20 dBc @ $2f_0, 3f_0, \dots$
Digital video input (TTL)	<ul style="list-style-type: none"> • logic $\uparrow\uparrow$ • or open input = rf power off • logic $\downarrow\downarrow$ • or shorted input = rf power on
RF on-/off-ratio digital	> 50 dB at any output level
RF switch-on/switch-off time	< 13 nsec @ P_{RF} : 10...90 %
RF output power level	+22 ... +32 dBm @ 50 Ω , amplifier is protected against load mismatch

RF output stability

warm-up time (10 min) $<\pm 5\%$
after warm-up time $<\pm 1\%$

Supply voltage

$U_S = 24\text{ V} \pm 0.5\text{ V}$

Supply current

$I_S = 440\text{ mA} \pm 50\text{ mA}$

Absolute Maximum Ratings

Supply voltage output stage

+27.0 V

Power output

no DC-feedback allowed

Case temperature

+55 °C • the driver must be mounted
on an adequate heatsink

Quality Standards

EMC-standards

VDE 0871 - B
FCC Rules Part 15 - B

Burn-in test

passive 2 h
active ½ h

Connectors and Mechanics

RF-Connector BNC female

TTL video input BNC female

Dimensions:
80 mm x 60 mm x 32 mm

Mounting plate:
100 mm x 32 mm

