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HLT-40/13

RF Generator for Acousto-Optic Q-Switches
[Q-Switch Driver]



A180817-EN

HF-POWER: 5 ... 20 Watt
DC-VOLTAGE: 13 Volt



Project: Q-Switch Driver 20 Watt

Technical Data

Performance Data

- Output Frequency 40.68 MHz according to ISM
- Output Power min. 5 W @ 50 Ω
- Output Power max. 20 W @ 50 Ω
- Output Voltage Sinus max. 31.6 V-RMS / 89.3 V_{ss} @ 50 Ω
- Output V.S.W.R. VSWR max. 1 : 2.0 @ P-Out = 20 W
- Overload protection Open- /Short- Circuit Proof / Output

RF-Modulation

- Analog Modulation 0 ... +5 V $\hat{=}$ 0 ... 100 % Output Power
- Digital Modulation TTL high / low = +5V / 0V
- Duty Cycle / Pulse Width min. 200 ns / max. CW
- Fall Time ~10 ns 10 / 90 %
- Rise Time ~20 ns 10 / 90 %
- Repetition Rate 0 ... 300 kHz



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Power Supply

- Supply Voltage DC +13 V max. 45 W
-DC / GND

Connectors

- HF OUT SMA 50 Ω
- Data IN / OUT 9 pol DSUB (DE-9) Pin 2, 3, 7 & 8 *
- DC Connector +13,8 V 9 pol DSUB (DE-9) Pin 4, 5 & 9 *
- GND Grounding Screw / M3
- Cooling Conduction through Housing Bottom

* see Page 05

Environment

- Operating Temperature 0 ... +50°C
- Storage Temperature -20 ... +80°C

Housing

- Material Aluminum / transparent chromated
Base: solid material, milled
Cover: 1.5 mm sheet
- Dimensions 107.5 x 25.0 x 73.0 mm (W x H x D)
- Weight 0.3 kg
- Mounting Holes 4 x \varnothing 3.4 mm / 70.0 x 60.0 mm

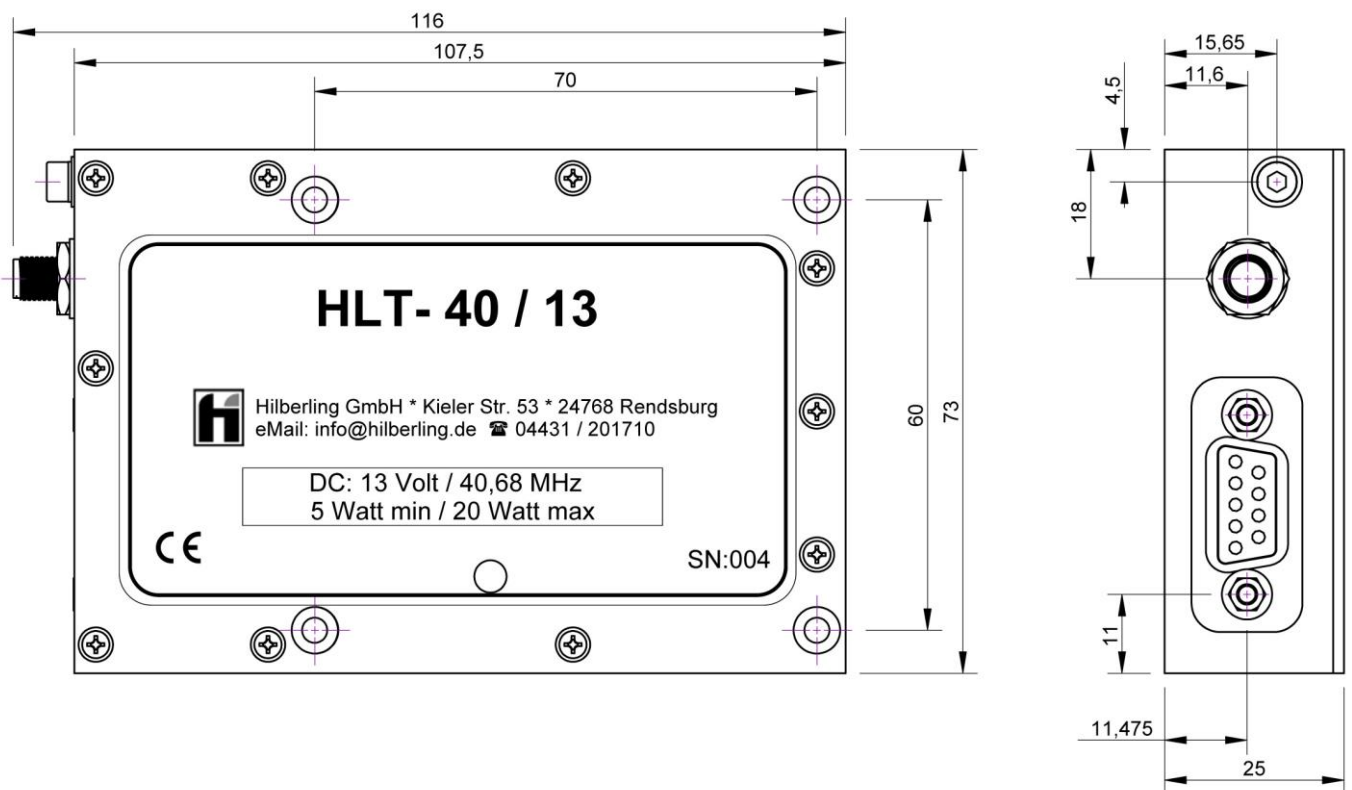
Quality Standards / EMC

- Testing Standards CE / EN 50178 / EN 50081-1 / EN 50082-1
EN 55011



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Housing





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Pin Assignment 9 pol D-SUB

PIN	Function
1	GND
2	SYNC-OUT
3	Digital Modulation +5 / 0 V
4	+13 V
5	+13 V
6	GND
7	HF-OK = LOW
8	Analog Modulation 0 ... +5 V
9	+13 V

