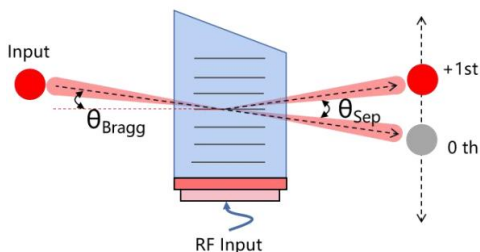


RF Driver Specifications 射频驱动器产品规格书 RD1002-080-24-025-CZ



1. SPECIFICATIONS (规格)

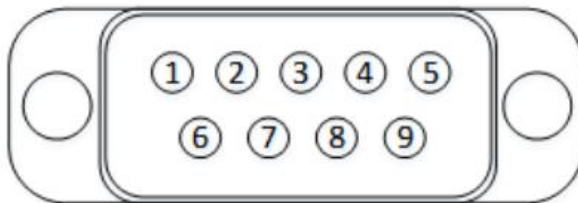
| | |
|--|--------------------------------------|
| RF frequency (频率频率) | 80MHz |
| Frequency stability (频率稳定度) | $\pm 40\text{ppm}/^\circ\text{C}$ |
| Output power (输出功率) | 1-25W |
| VSWR (输出驻波比) | 1.2/1 |
| Linearity (线性度) | 1.1/1 |
| Digital Extinction ratio (数字消光比) | >45dB |
| Analog Extinction ratio (模拟消光比) | >45dB |
| Digital rise&fall time (数字调制上升&下降时间) (10%-90%) | 20-50ns |
| Trigger frequency (触发频率) | DC-1MHz |
| Trigger delay (触发延迟) | 50 \pm 10ns |
| Logic (逻辑) | TTL_HIGH=RF_OUTPUT |
| Digital input (数字输入) | Low<0.8V, 3.3V<High<5V@1.5k Ω |
| Analog input (模拟输入) | 0-5V@10k Ω |
| Second and multiple harmonics (二次及多次谐波) | <-25dBc |
| Output Impedance (输出阻抗) | 50 Ω |
| Supply voltage (供电电压) | +24VDC \pm 1% |
| Supply current (供电电流) | 2A@25W |
| Cooling (散热方式) | Conduction cooling (水冷散热) |
| Temperature Range (温度范围) | 10-50 $^\circ\text{C}$ 环境温度 |

2. ORDERING CODES (编码规则)

| | C/F | Supply voltage | PWR | IC/work mode |
|-----------|-----|----------------|-----------|--------------|
| RD1001— | XXX | — XXX | — XXX | — XX |
| 27.12 MHz | 027 | 024 24 V | 050 50 W | SA |
| 40.68 MHz | 041 | 048 48 V | 100 100 W | CF |

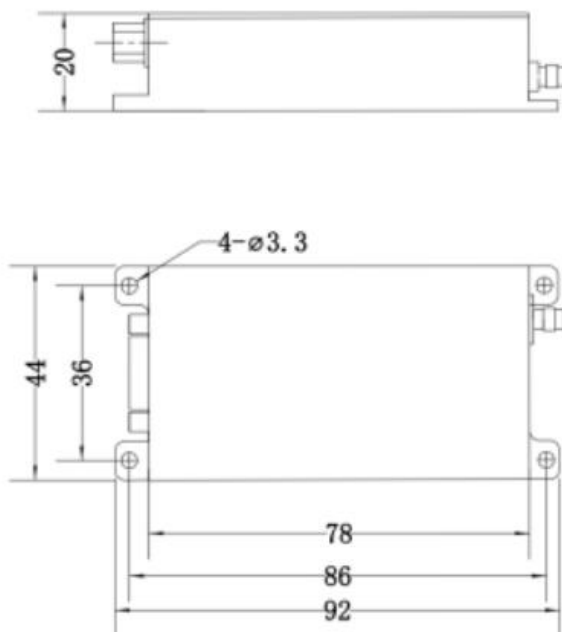
散热片冷却, A05模式;
传导冷却, FPS模式;

3. Interface definition (接口定义)

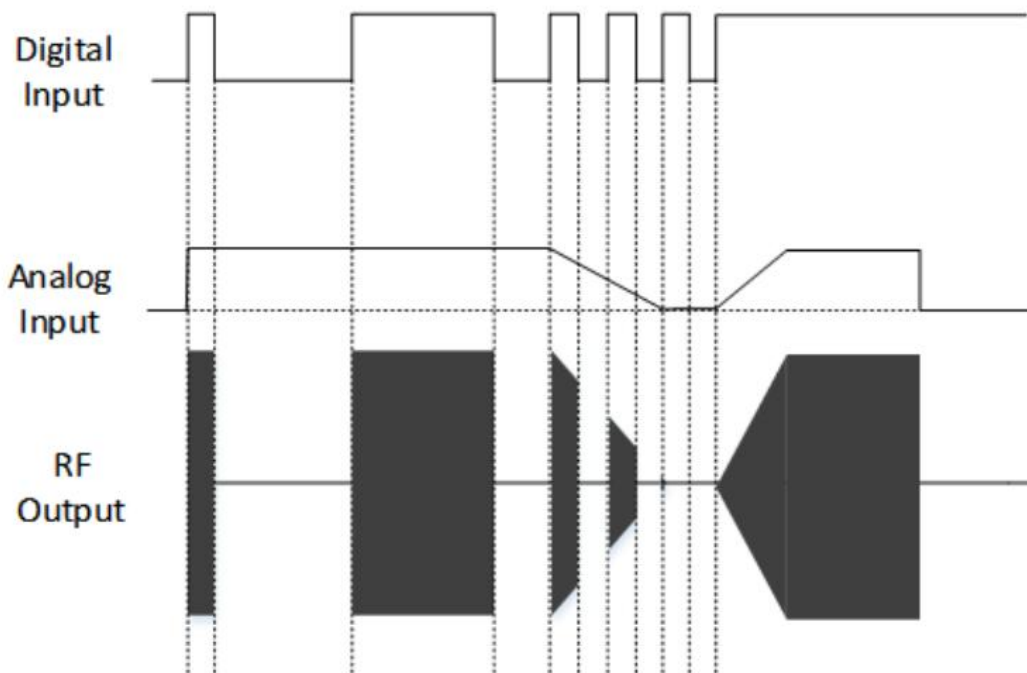


| 名称 | 引脚 | 功能 |
|---------|------------|-------------------|
| FPS | 2 | 首脉冲抑制控制 |
| Digital | 5 | 外部数字信号控制 (3.3-5V) |
| Analog | 6 | 外部模拟信号控制 (0-5V) |
| GND | 4 | 地 |
| +24V | 9 | 供电 |
| NC | 1, 3, 7, 8 | / |

4. DIMENSIONS (外形尺寸-mm)



5. Control Logic (控制逻辑)



6. SUGGESTED A0 Device (建议声光器件型号)

7. REVISION (版本)

| Number (版本号) | Revisions date (修订日期) | Revision (修改项目) | Revision description (修订内容说明) |
|-----------------|--------------------------|--------------------|----------------------------------|
| A | 2024. 8. 4 | New | / |

Quality Assured: In house made, high damage threshold, Vacuum bonding, 100% Diffraction efficiency test & burn-in test.