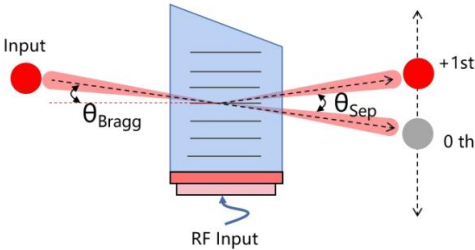


RF Driver Specifications  
射频驱动器产品规格书  
RD1052-040-24-003-CA



1. SPECIFICATIONS (规格)

|                                                |                                                                    |
|------------------------------------------------|--------------------------------------------------------------------|
| RF frequency (射频频率)                            | 40MHz                                                              |
| Frequency stability (频率稳定度)                    | $\pm 0.1\text{ppm}/^{\circ}\text{C}$                               |
| Output power (输出功率)                            | 3W                                                                 |
| VSWR (输出驻波比)                                   | 1.1/1                                                              |
| Linearity (线性度)                                | 1.1/1                                                              |
| Digital Extinction ratio (数字消光比)               | $>45\text{dB}$                                                     |
| Analog Extinction ratio (模拟消光比)                | $>45\text{dB}$                                                     |
| Digital rise&fall time (数字调制上升&下降时间) (0%-100%) | $<50\text{ns}$                                                     |
| Analog rise&fall time (模拟调制上升&下降时间) (0%-100%)  | $<50\text{ns}$                                                     |
| Trigger frequency (触发频率)                       | DC-1MHz                                                            |
| Trigger delay (触发延迟)                           | $50\pm 10\text{ns}$                                                |
| Logic (逻辑)                                     | TTL_HIGH=RF_OUTPUT                                                 |
| Digital input (数字输入)                           | Low $<0.8\text{V}$ , 3.3V $<\text{High}<5\text{V}@1\text{k}\Omega$ |
| Analog input (模拟输入)                            | 0-5V@1k $\Omega$                                                   |
| Second and multiple harmonics (二次及多次谐波)        | $<-25\text{dBc}$                                                   |
| Output Impedance (输出阻抗)                        | 50 $\Omega$                                                        |
| Supply voltage (供电电压)                          | $+24\text{VDC}\pm 1\%$                                             |
| Cooling (散热方式)                                 | Conduction cooling (传导散热)                                          |
| Temperature Range (温度范围)                       | 0-50 $^{\circ}\text{C}$ 环境温度                                       |

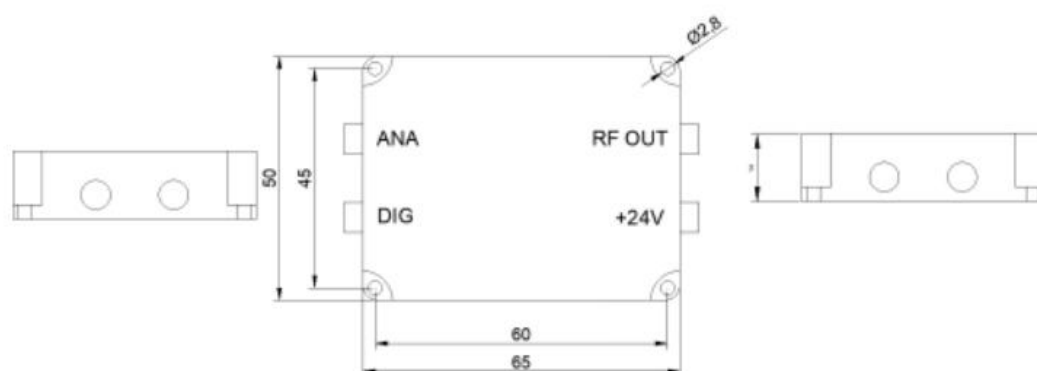
2. ORDERING CODES (编码规则)

|           | C/F | Supply voltage | PWR       | IC/work mode |               |
|-----------|-----|----------------|-----------|--------------|---------------|
| RD1001—   | XXX | — XXX          | — XXX     | — XX         |               |
| 27.12 MHz | 027 | 024 24 V       | 050 50 W  | SA           | 散热片冷却, A05模式; |
| 40.68 MHz | 041 | 048 48 V       | 100 100 W | CF           | 传导冷却, FPS模式;  |

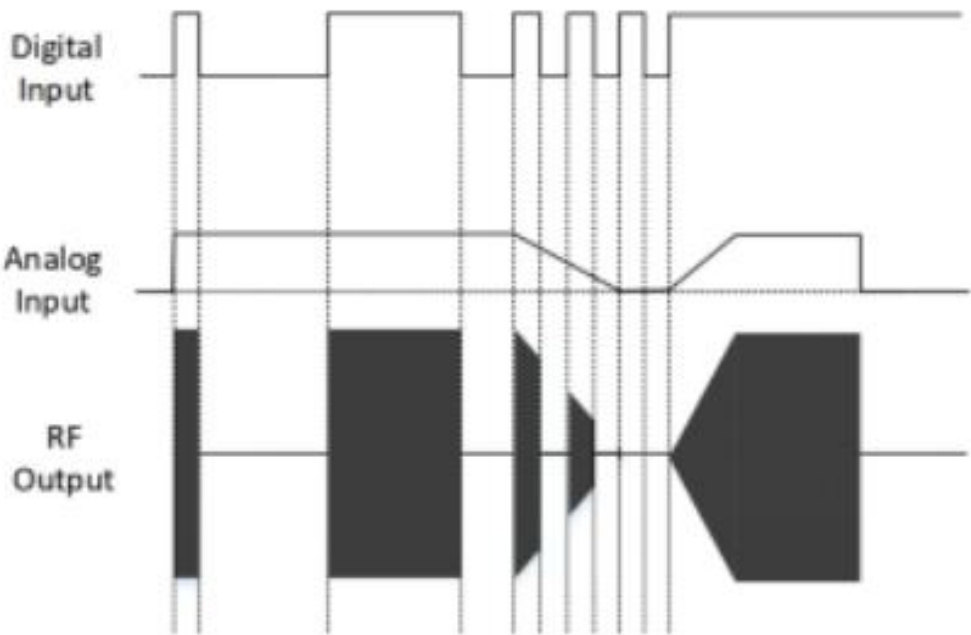
### 3. Interface difinition (接口定义)

| 名称     | 引脚                    | 功能                 |
|--------|-----------------------|--------------------|
| DIG    | SMC-M                 | 外部数字信号控制 (3.3V-5V) |
| ANA    | SMC-M                 | 外部模拟信号控制 (0V-5V)   |
| +24V   | Feedthrough Capacitor | 电源供电               |
| RF OUT | SMA-F                 | 射频输出               |

### 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<br>(版本号) | Revisions date<br>(修订日期) | Revision<br>(修改项目) | Revision description<br>(修订内容说明) |
|-----------------|--------------------------|--------------------|----------------------------------|
| A               | 2024. 9. 5               | New                | /                                |

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