RF Drivers

RF drivers can generate RF signals at fixed or variable-frequencies. Specified waveforms could be produced by different modulated signals to meet the requirements of different acousto-optic components and determine how much an optical beam is modulated, deflected, or tuned. CASTECH's RF drivers are able to generate RF signal at 27.12MHz, 40.68MHz, 68MHz, 80MHz, 100MHz, 120MHz, 200MHz, 250MHz, 300MHz and even higher, with RF power up to 120W. A variety of operating modes are available including FPS, PPK, R05 and A05 (Analog).

Acousto-optic variable-frequency series drive of frequency shifter, deflector and filter, can output RF signal with high precision and broad frequency range, and support digital control, analog control, *etc.* PC softwares are equipped, with which users can set the frequency and power at will. The frequency sweeping and other functions can also be set (TA series). For high-speed frequency conversion applications, it is capable of fast frequency switching(TB series).
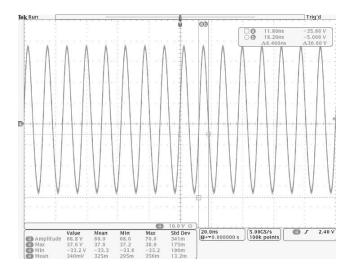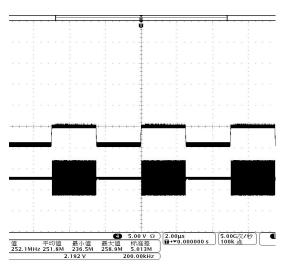
Applications

● **Matching acousto-optic components**
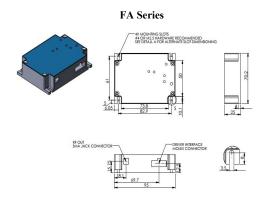

RF Output Waveform

Modulation Waveform

RF Drivers

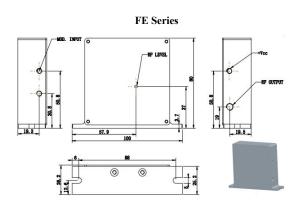## Fixed-Frequency Series Model Number： CARD-as-f-vpt-bme-c

Series(as)	RF(f)	Supply Voltage(v)	Output Power(p)	Cooling(t)	Channel(b)	Mode(m)	Function(e)	RF Connector(c)
FA (Fixed-frequency series A)	40.68 MHz 68 MHz 80 MHz	15D (15 VDC) 24D (24 VDC)	20 W 25 W	C (Conduction-Cooled)	1	F (FPS) P (PPK) A (A05) R (R05) M (M05)	C (Common) H (TTL_HIGH = RF on) L (TTL_HIGH = RF off)	AF (SMA-F)
FD (Fixed-frequency series D)	40.68 MHz 68 MHz 80 MHz 100 MHz 110 MHz 120 MHz ...	12D (12 VDC) 15D (15 VDC) 24D (24 VDC)	5W / 20W / 40W	C (Conduction-Cooled) A (Air-Cooled) W Water-Cooled	1	F (FPS) A (A05) D (Digital)		
FB (Fixed-frequency series B)	27.12 MHz 40.68 MHz 68 MHz 80 MHz	24D (24 VDC) 28D (28 VDC)	50W / 100W	C (Conduction-Cooled) A (Air-Cooled) W Water-Cooled	1, 2	F (FPS) A (A05) D (Digital)		NF (BNC-F)
FE (Fixed-frequency series E)	200 MHz 250 MHz 300 MHz ...	24D (24 VDC)	2.5 W	C (Conduction-Cooled)	1	D (Digital) A (A05)* DA (Digital+Analog)		AF (SMA-F)

*Analog control voltage can be requested：A5：0-5 V，A1：0-1 V

Typical Specifications

Working Frequency	Maximum RF Power	Rise/Fall time
27.12 MHz	100 W	<150 ns
40.68/68/80 MHz	15/20/25 W	<35 ns
200/250 MHz	2.5 W	<6 ns

Housing dimensions(mm)：

FA Series

FE Series

RF Drivers

Variable-Frequency Series Model Number：CARD-as-f-vpt-bme-c

Series(as)	RF(f)	Supply Power(v)	Output Power(p)	Cooling(t)	Channel(b)	Mode(m)	Function(e)	RF Connector(c)
TA (Variable-frequency series A)	60~120 MHz ...	24D (24 VDC)	0.5~4 W	C (Conduction-Cooled)	1	Programmable frequency	C (Common) ...	AF (SMA-F) AM (SMA-M)
TB （Variable-frequency series B）	70~120 MHz ...	24D (24 VDC)	0.5~4 W	C (Conduction-Cooled)	1	A (A05)* D (Digital)	Px (channel)	AF (SMA-F)
TE (Variable-frequency series E)	70~120 MHz	24D (24 VDC)	0.5~4 W	C (Conduction-Cooled)	1	Voltage control 0~10V D (Digital)	C (Common) ...	AF (SMA-F) CF (SMC-F)

*Analog control voltage can be requested：A10：0-10 V，A5：0-5 V，A1：0-1 V

Typical Specifications

Working Frequency	RF Power*	Working Mode***	Switching Speed
60~120 MHz	4 W	Programmable frequency**	~us
70~120 MHz	4 W	Voltage control 0~10 V, Digital**	~50ns

*The output power of the product is matched according to the load

** Supporting related host computer software and control instruction set

***Special control methods can be customized

Housing dimensions(mm)：

TA Series

scale 4:5

TB Series

scale 2:5