北斗邦泰
BDSTAR TIME

-TFD10-5

Low phase noise

Frequency divider

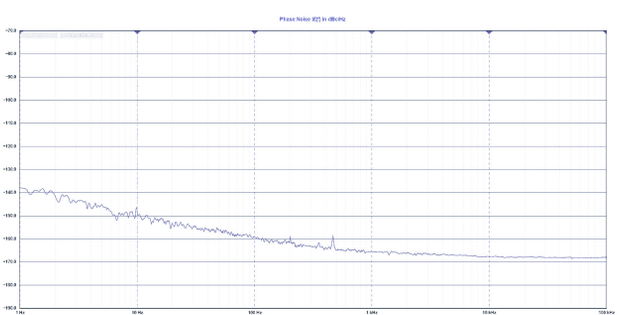
Product features

- 1-way 10 MHz input
- 2 sine wave outputs each at 5MHz and 1MHz
- Ultra low phase noise <-135dBc/Hz@1Hz
- +12~+15VDC power supply

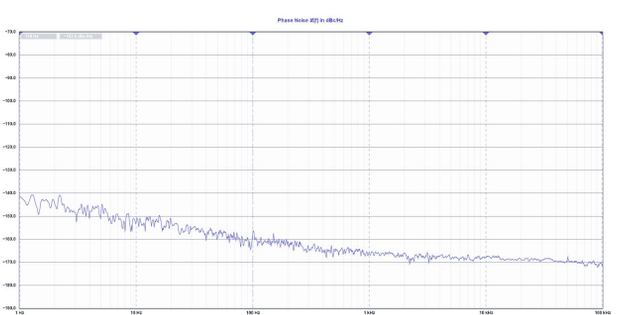
Product profile

TFD 10-5 low noise frequency divider is an ultra-low phase noise frequency divider, with a built-in unique frequency divider and low noise signal distributor, with 5M and 1M output, which is suitable for frequency division operation as high-stable 10 MHz signals such as hydrogen clock and cesium clock. This frequency divider adopts our BDSTAR TIME Technology’ s standard package and interface, and can be installed in various ways.

Typical curve



The 5 MHz output phase noise



The 1 MHz output phase noise

Application area

National defense

Aerospace

Satellite communication

Test measuring equipment

Earth station

Point-to-point wireless communication

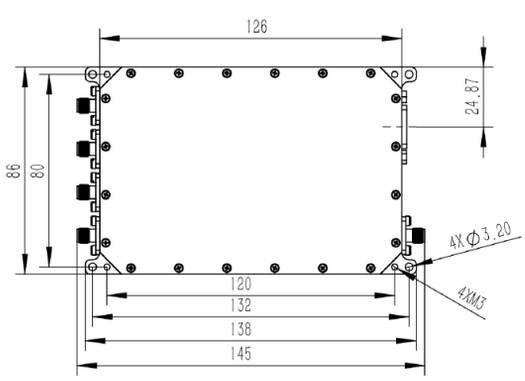
RF microwave circuit design

Technical Parameters

-TFD10-5

Test Item		Technical Indicators
Input frequency		10MHz
Input power		+5~+13dBm
Output frequency		5MHz and 1MHz 2 ways each，50Ω，⩾ 8dBm
Additional frequency stability	1s	⩽ 5×10^{-14}
	1000s	⩽ 8×10^{-15}
Additional phase noise	1Hz	⩽ -135dBc/Hz
	10Hz	⩽ -145dBc/Hz
	100Hz	⩽ -155 dBc/Hz
	1kHz	⩽ -163 dBc/Hz
	10kHz	⩽ -165dBc/Hz
Harmonic clutter		harmonic ⩽ -30dBc，clutter ⩽ -80dBc
Working temperature	Bottom plate temperature	-20°C ~+70°C
Storage temperature		-40°C ~+85°C
Power supply	±4%	+12V~+15V
Rate of work		⩽ 3W
External dimension	Body size	126mm×86mm×19mm
	Maximum size	138mm×86mm×19mm
Weight		⩽ 300g

External Dimension



Unit：mm

Interface Definition（DSUB9, needle）：

PIN 1：The Ground
PIN 6: Power supply +12~+15V
Other：Internal testing. No wiring.