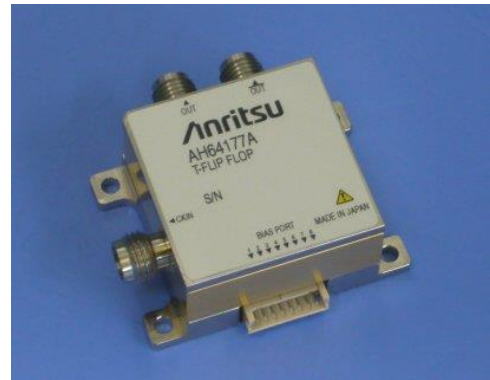


AH64177A

T-FLIP FLOP



Features

- Operating frequency: DC – 60GHz
- Single-ended input
- Differential output
- Power consumption: 0.9W typ.
- Package size: 28mm x 28mm x 17mm

Applications

Testing for high speed digital communications / Testing for high speed semiconductors

Absolute Maximum Ratings

Items	Symbols	Conditions	Units	Ratings	
				min.	max.
Input signal voltage	Vin		V	-1	+0.7
Supply voltage	VEE	-3.5V	V	-3.7	+0.5
Operating temperature	Tc	Case temperature	°C	+5	+50
Storage temperature	Tstg		°C	0	+60

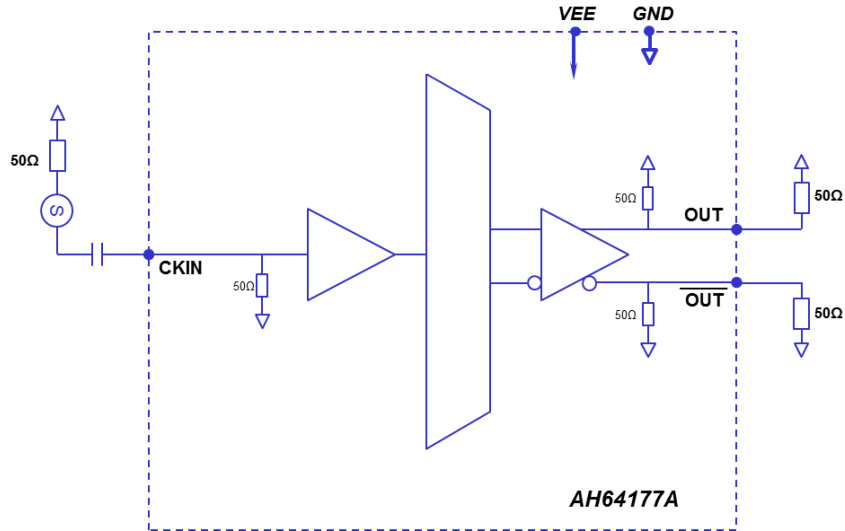
Specifications

Tc=25°C, VEE=-3.5V, Zin=50ohms, Zout=50ohms

Items	Conditions	Units	Specifications		
			min.	typ.	max.
Frequency	Input	GHz	DC		60
	Output		DC		30
Clock input voltage	CKin	Vp-p	0.2	0.5	
Output voltage	Vin=0.5Vp-p @60GHz	Vp-p	0.3	0.5	
Jitter ^{*1}		fs rms		250	
Supply current	VEE=-3.5V	mA		250	350
Power consumption		W		0.9	

*1: The specifications are based on the measurement using the Keysight 86118A 70GHz Remote sampling head and 86107A Precision time base.

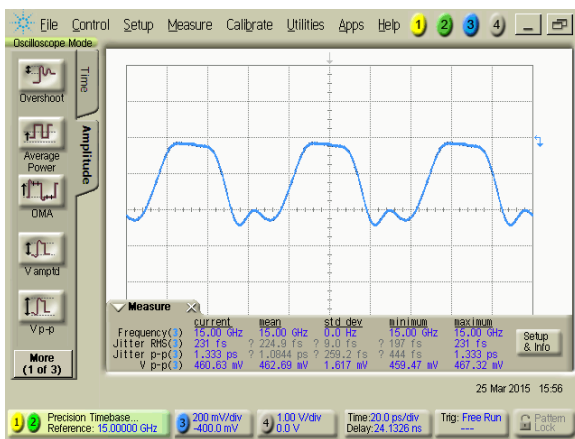
Block Diagram



Electrical Characteristics

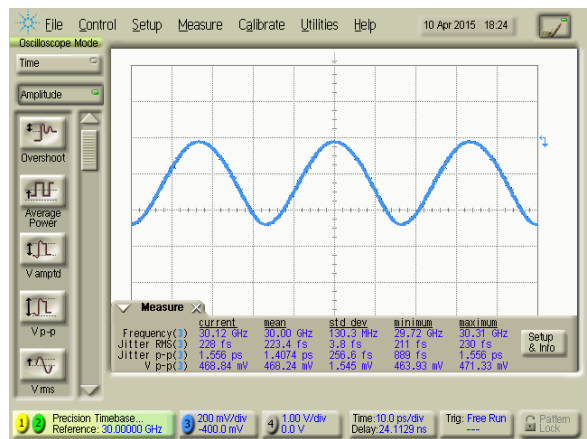
Pulse response

Input: 30GHz Output: 15GHz



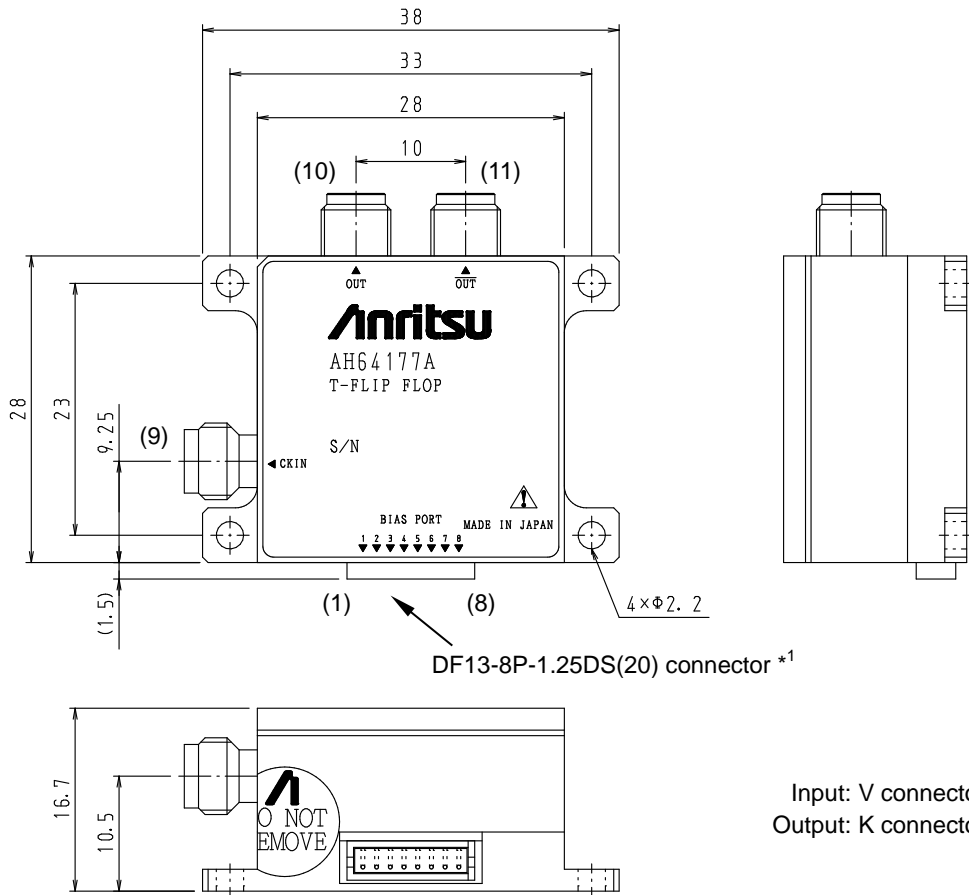
V: 0.2V/div H: 20ps/div

Input:60GHz Output: 30GHz



V: 0.2V/div H:10ps/div

Dimensions



Input: V connector
Output: K connector

Units: mm

No.	Symbols	Functions	Remarks
1	NC		
2	NC		
3	NC		
4	GND	Ground	
5	VEE	Power supply	-3.5V
6	NC		
7	NC		
8	NC		
9	CKIN	Clock Input port	
10	OUT	Output port (non-invert)	+0/-0.5V
11	OUT	Output port (invert)	+0/-0.5V

*1: Please utilize attached DF13-8S-1.25C connector to supply DC power.

Please consult Anritsu Corporation If the products are used in the high reliability system.
Specifications are subject to change without notice.