

## AH64175A 2:1 MULTIPLEXER



### Features

- Operating bitrate: DC – 64Gbit/s
- Half-rate clock input
- Differential output
- Power consumption: 1.2W 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

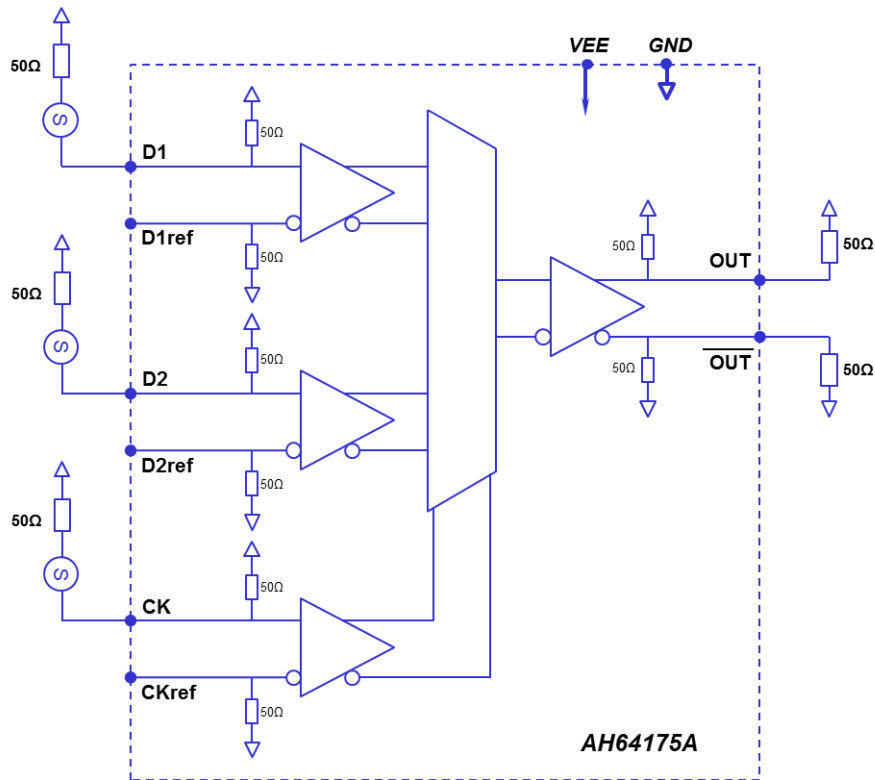
### Specifications

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

Items	Conditions	Units	Specifications		
			min.	typ.	max.
Bitrate		Gbit/s	DC		64
Input voltage	D1, D2, CK	Vp-p	0.2	0.5	0.7
Output voltage	Vin=0.5Vp-p @64Gbit/s	Vp-p	0.3	0.4	
Jitter *1	~56Gbit/s	fs rms		250	
	~64Gbit/s			350	
Rise time/ fall time *1	20-80%	ps		7	
Supply current	VEE=-3.5V	mA		350	450
Power consumption		W		1.2	

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

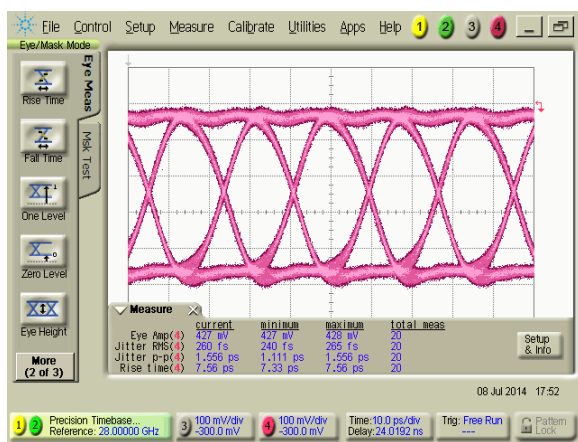
## Block Diagram



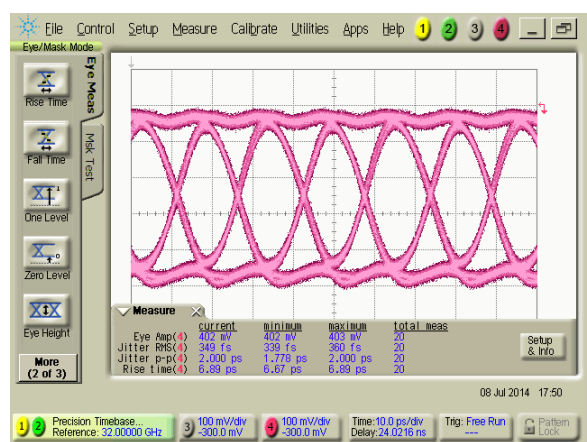
## Electrical Characteristics

Pulse response

@56Gbit/s

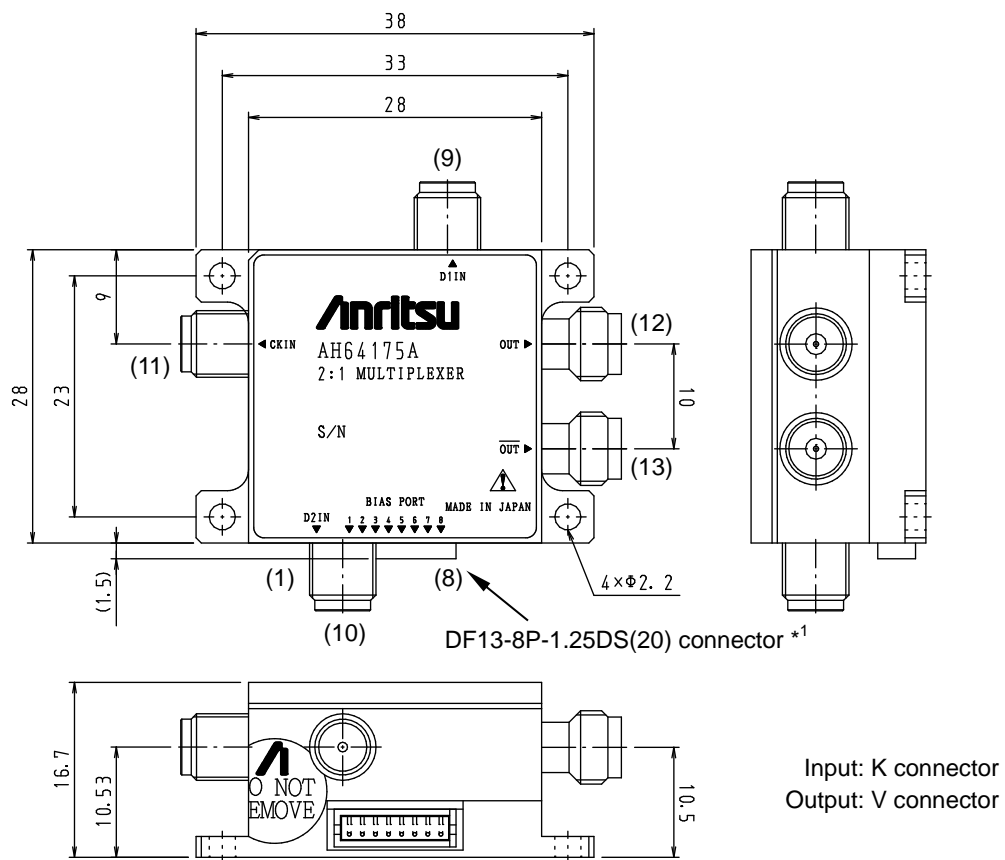


@64Gbit/s



V:0.1V/div H:10ps/div

## Dimensions



Units: mm

No.	Symbols	Functions	Remarks
1	D2ref	Data2 input reference	-0.25V
2	CKref	Clock input reference	-0.25V
3	D1ref	Data1 input reference	-0.25V
4	GND	Ground	
5	VEE	Power supply	-3.5V
6	NC		
7	NC		
8	NC		
9	D1IN	Data1 Input port	+0/-0.5V
10	D2IN	Data2 Input port	+0/-0.5V
11	CKIN	Clock Input port	+0/-0.5V
12	OUT	Output port (non-invert)	
13	OUT	Output port (invert)	

\*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.

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