

AH64176A 1:2 DEMULTIPLEXER



Features

- Operating bitrate: DC – 64Gbit/s
- Half-rate clock input
- Single-ended data/clock input
- Data input sensitivity: <50mVp-p
- Power consumption: 1.5W 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

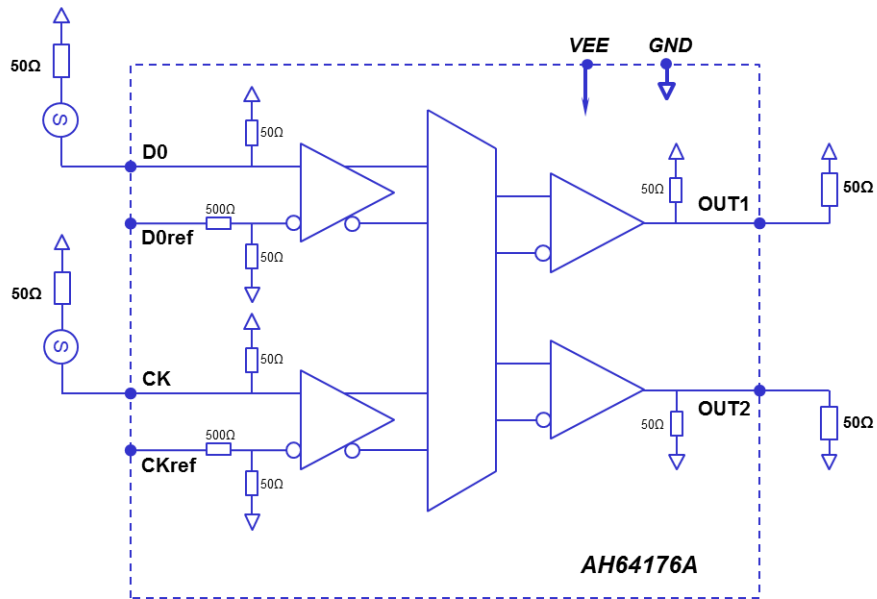
Specifications

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

Items	Conditions	Units	Specifications		
			min.	typ.	max.
Bitrate		Gbit/s	DC		64
Data input voltage	D0	Vp-p	0.05		0.7
Clock input voltage	CK	Vp-p		0.5	
Output voltage	Vin=0.5Vp-p @64Gbit/s	Vp-p	0.25	0.35	
Jitter ^{*1}		fs rms		300	
Rise time/ fall time ^{*1}	20-80%	ps		8	
Supply current	VEE=-3.5V	mA		430	500
Power consumption		W		1.5	

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

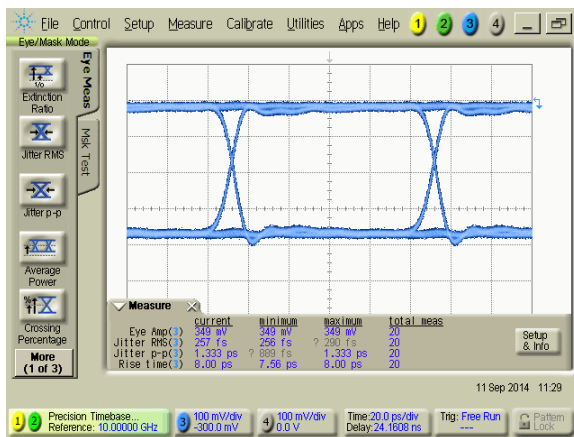
Block Diagram



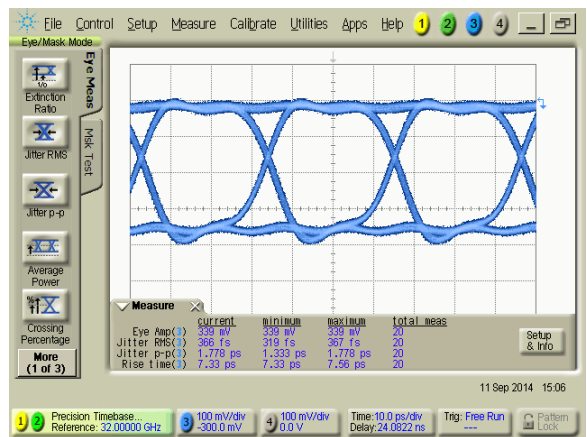
Electrical Characteristics

Pulse response

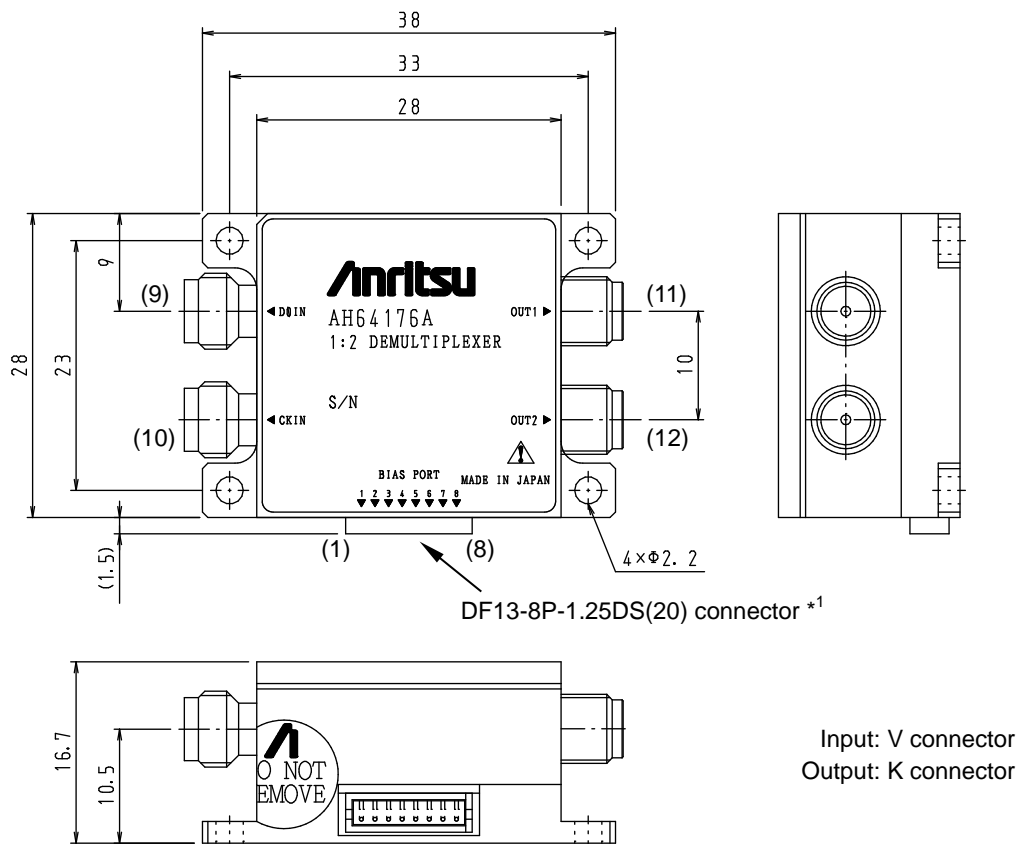
Input: 20Gbit/s Output: 10Gbit/s



Input: 64Gbit/s Output: 32Gbit/s



Dimensions



Units: mm

No.	Symbols	Functions	Remarks
1	CKref	Clock input reference	0V (input level: +0.25V / -0.25V)
2	D0ref	Data input reference	0V (input level: +0.25V / -0.25V) -2.75V (input level: +0V / -0.5V)
3	NC		
4	GND	Ground	
5	VEE	Power supply	-3.5V
6	NC		
7	NC		
8	NC		
9	D0IN	Data Input port	
10	CKIN	Clock Input port	
11	OUT1	Output1 port	+0/-0.5V
12	OUT2	Output2 port	+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.