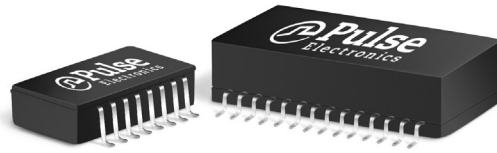
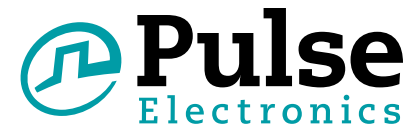


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Copperhead Series



- Small package incorporating active transmit and passive receive circuits with integrated isolation transformers
- Low power dissipation
- Low transmit/receive jitter
- Recommended for distances up to 20 meters
- AS9100 Certified (Based on, including ISO 9001:2000)
- IC grade transfer-molded package withstands 225 degree C peak temperature profile.

TRANSMITTER — Electrical Specifications @ 25°C — Operating Temperature -55°C to +125°C

Part Number	Input Data Voltage - V _{IL} (V)			Input Data Voltage - V _{IH} (V)			Input Voltage Differential - V _{IN} (mV)			Input Current - I _{IL} (μA)	Input Current - I _{IH} (μA)	Differential Signal Level - V _{OUT} (mV)		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MAX	MIN	TYP	MAX
TM1062DUXB	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	40	150	1200	1300	1500
TM1062HUXB	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	500	750	1200	1300	1500
TM1062DU3XB	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	500	750	1200	1300	1500
TM125TXHUA	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	500	750	1200	1300	1500

TRANSMITTER — Additional Electrical Specifications @ 25°C — Operating Temperature -55°C to +125°C

Part Number	Power Dissipation (mW)	θ _{JA} (°C/W)		Input Voltage (V)	Data Rate - DR (Mb/s)		Total P-P Transmit Jitter * (pS)		Output Rise-Fall Time (20-80%) * (pS)		Return Loss (dB)
	TYP	@85°C	@125°C	TYP	MIN	MAX	TYP	MAX	TYP	MAX	MIN
TM1062DUXB	232	41	39	3.3V	246	1062	62	94	275	400	-12
TM1062HUXB	232	41	39	3.3V	246	1062	62	94	275	400	-12
TM1062DU3XB	700	34	30	3.3V	246	1062	62	94	275	400	-12
TM125TXHUA	232	41	39	3.3V	98	246	62	94	275	400	-12

TRANSMITTER — Additional Electrical Specifications @ 25°C — Operating Temperature -55°C to +125°C

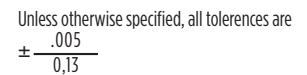
Part Number	Turns Ratio	Primary Inductance - L _M (μH)	Rise Time (20%-80%) (pS)	Data Rate - DR (Mb/s)		Winding Resistance - DCR (Ω)	Insertion Loss (dB)	Return Loss (dB)
	TYP	MIN	MAX	MIN	MAX	TYP	MAX	MAX
TM1062DUXB	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062HUXB	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062DU3XB	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM125TXHUA	1:1	44	300	98	246	0.2	-2 MAX	-12 MIN

Notes: To order RoHS compliant part, add the suffix "Z" to the part number (i.e.TM1062DUXBZ). Part Limited to 225°C Max Reflow Temperature.

* At 1062 Mb/s Data Rate

Copperhead Series

Mechanicals



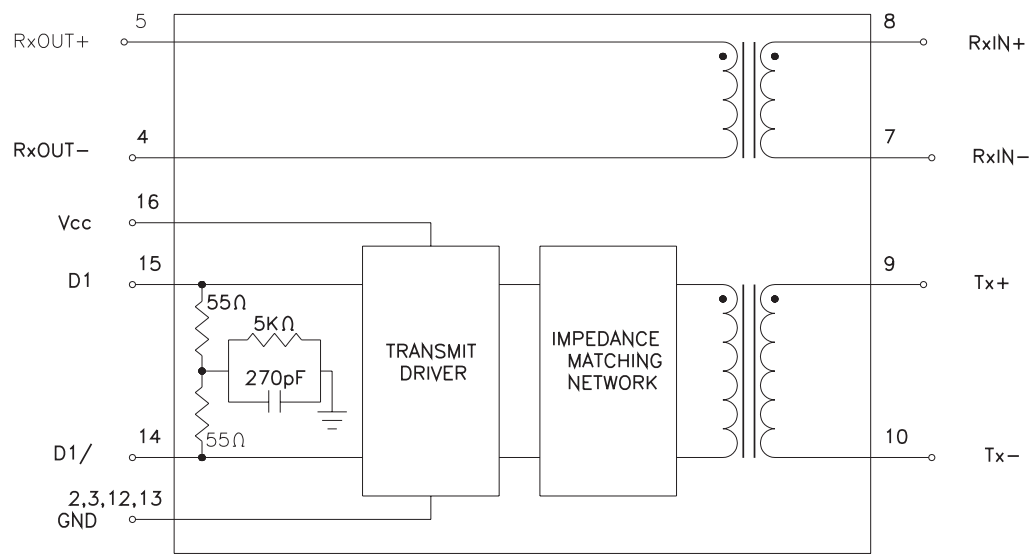
Unless otherwise specified, all tolerances are
 $\pm \frac{.005}{0.13}$

IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

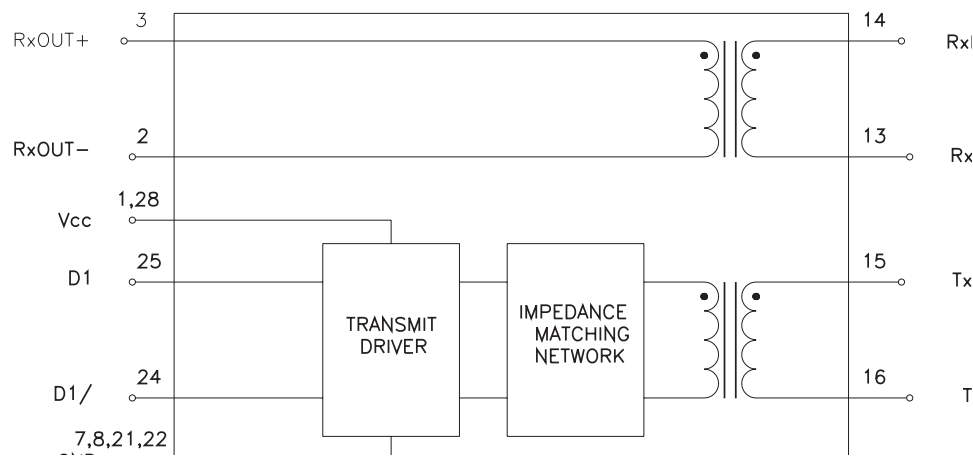
Copperhead Series

Schematics

TM1062HUXB/TM125TXHUA



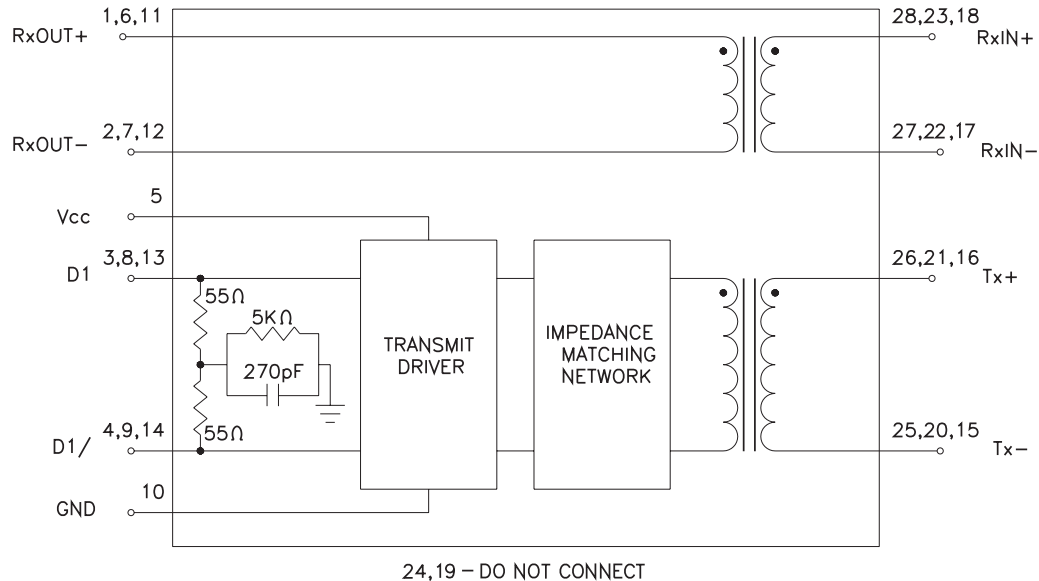
TM1062DUXB



IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Copperhead Series

TM1062DU3XB



For More Information

Pulse North America Headquarters
Two Pearl Buck Court
Bristol, PA 19007
U.S.A.

Tel: 215 781 6400
Fax: 215 781 6403

Pulse Europe
Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 0
Fax: 49 7032 7806 135

Pulse China Headquarters
B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejinan Road
High-Tech Zone
Nanshan District
Shenzhen, PR China 518057
Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China
Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Road West
Shanghai 200336
China

Tel: 86 21 62787060
Fax: 86 2162786973

Pulse South Asia
135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6287 8998

Pulse North Asia
3F, No. 198
Zhongyuan Road
Zhongli City
Taoyuan County 320
Taiwan R. O. C.
Tel: 886 3 4356768
Fax: 886 3 4356823 (Pulse)
Fax: 886 3 4356820 (FRE)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2012. Pulse Electronics, Inc. All rights reserved.