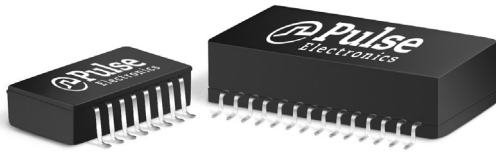


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

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.
- Made in the U.S.A

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

Part (V)	Input Data Voltage - V _{IL} (V)			Input Data Voltage - V _{IH} (mV)			Input Voltage Differential - V _{IN} (μA)			Input Current - I _{IL}	Input Current - I _{IH}	Differential Signal Level - V _{OUT} Number		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MAX	MIN	TYP	MAX
TM1062TXDUA	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	40	150	1200	1300	1500
TM1062TXHUA	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	500	750	1200	1300	1500
TM1062TXHUA11	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	500	750	1200	1300	1500
TM1062TX3DUA	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) Voltage		Input (V _{CC} 310%)	Data Rate - D _R (Mb/s)		Total P-P Transmit Jitter (pS)	Time (20-80%)	Output Rise-Fall Loss (pS)	Return Loss (dB)
	TYP	@85°C	@125°C	TYP	MIN	MAX	TYP	MAX	TYP	MAX
TM1062TXDUA	232	41	39	3.3V	246	1062	62	94	275	400
TM1062TXHUA	232	41	39	3.3V	246	1062	62	94	275	400
TM1062TXHUA11	232	41	39	3.3V	246	1062	62	94	275	400
TM1062TX3DUA	700	34	30	3.3V	246	1062	62	94	275	400

TRANSFORMER COUPLED RECEIVER — Electrical Specifications @ 25°C — Operating Temp. -55°C to +125°C

Part Number	Turns Ratio	Primary Inductance - L _M (μH)	Rise Time (20%-80%) (pS)	Data Rate - D _R (Mb/s)		Winding Resistance - DCR (Ω)	Insertion Loss (dB)	Return Loss (dB)
	TYP	MIN	MAX	MIN	MAX	MAX		
TM1062TXDUA	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062TXHUA	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062TXHUA11	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062TX3DUA	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN

* At 1062 Mb/s data

Note: Add suffix "T" to part number for Tape and Reel

Mechanical

	TXDUA	TX3DUA
Weight	2.3 grams	2.8 grams
Tape & Reel	350/reel	350/reel
Tray	25/tray	25/tray
MSL	3	3

Dimensions: Inches / mm
Unless otherwise specified, all tolerances are 3.005 / 0.13

1
www.pulseruggedized.com
M103.F (5/18)

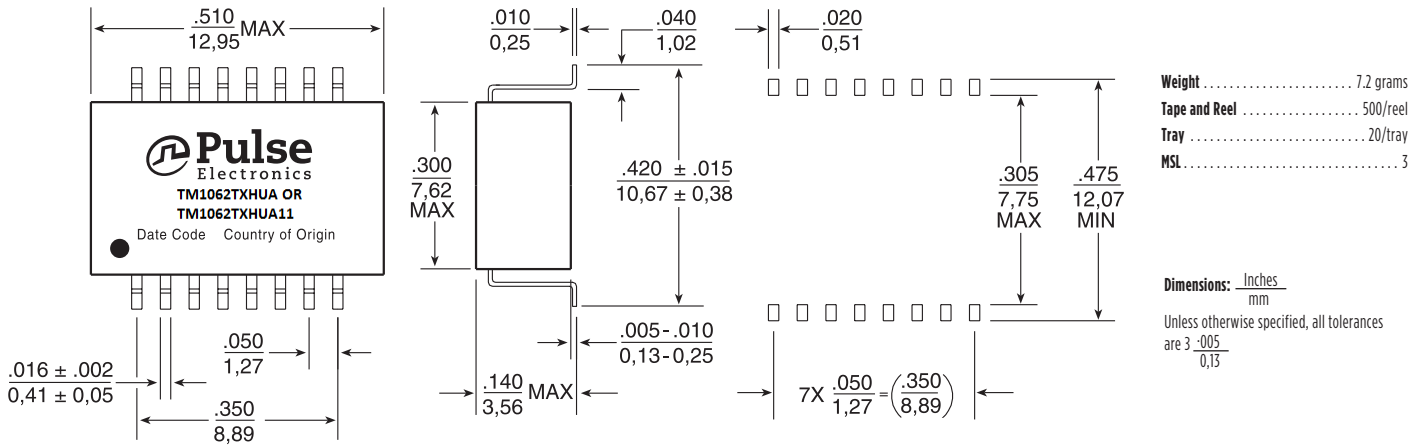
IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Copperhead Series



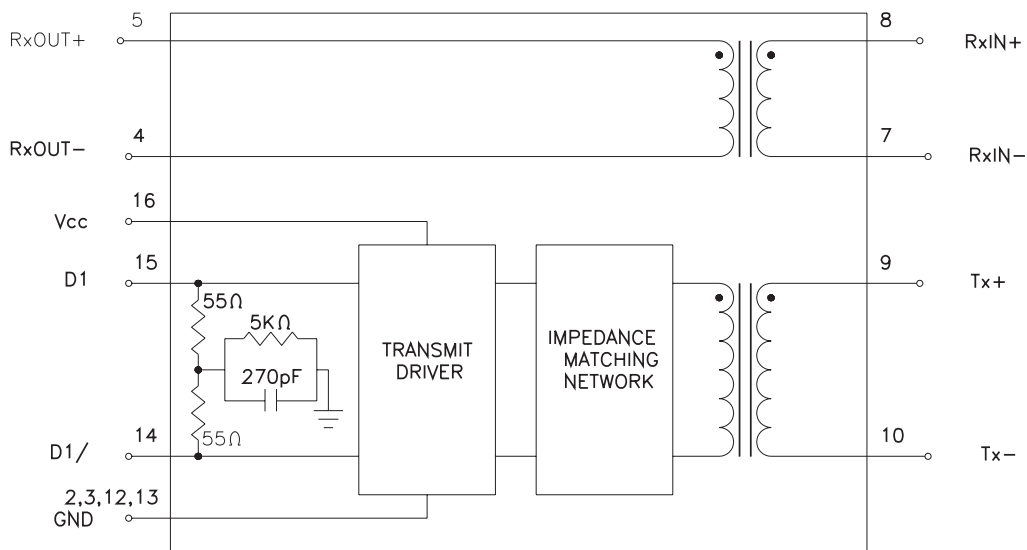
Mechanical

TM1062TXHUA & TM1062TXHUA11



Schematic

TM1062TXHUA



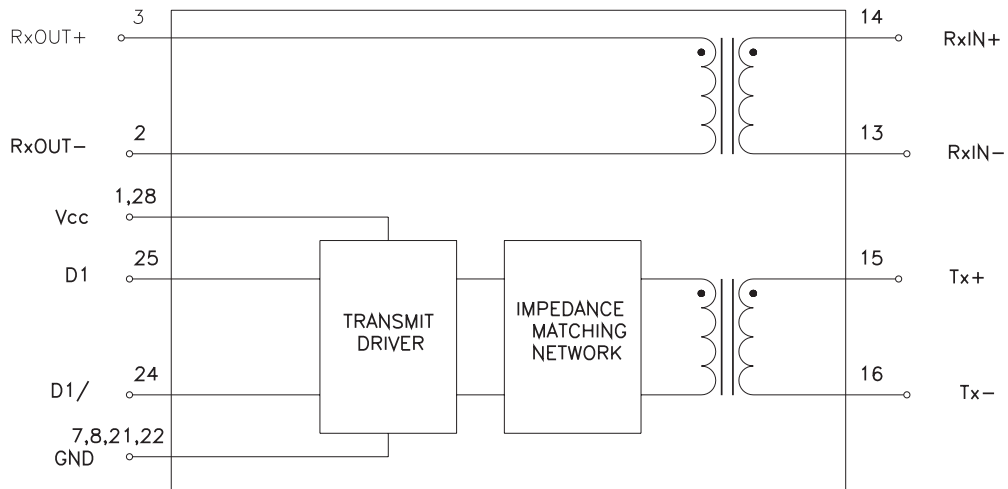
IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Copperhead Series

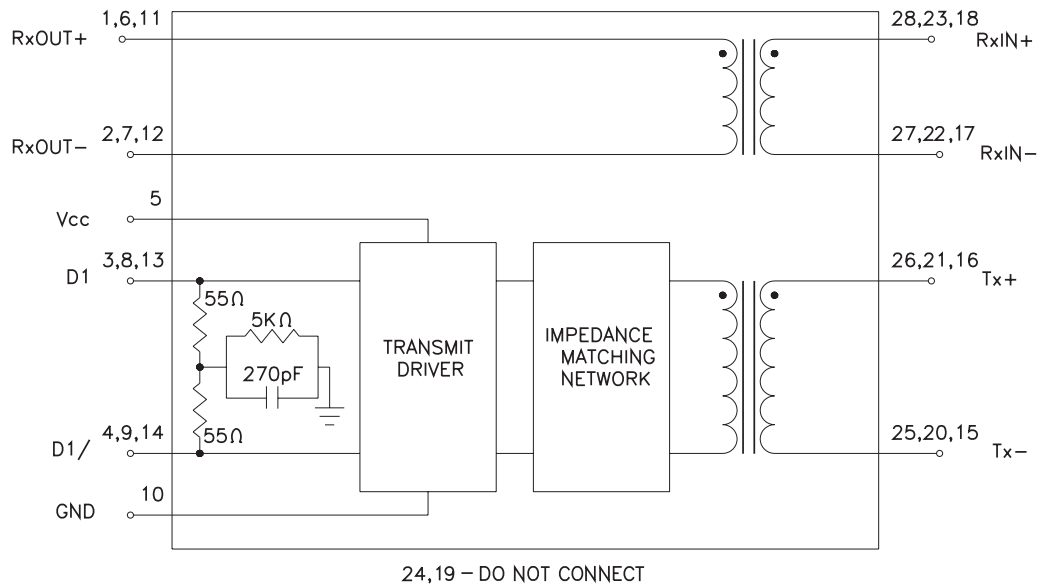


Schematics

TM1062TXDUA



TM1062TX3DUA



For More Information

Corporate Headquarters

PulseR, LLC

Two Pearl Buck Court
Bristol, PA 19007
U.S.A.

Tel: 215 781 6400
Fax: 215 781 6403

For Global Sales Representatives and Locations:

Visit: <http://www.pulseruggedized.com>

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, 2018, PulseR, LLC. All rights reserved.