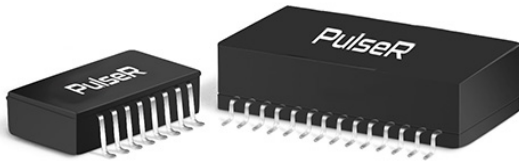


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Non-Lead Copperhead Series

PulseR
Ruggedized Solutions

- R Small package incorporating active transmit and passive receive circuits with integrated isolation transformers
- R Low power dissipation
- R Low transmit/receive jitter
- R Recommended for distances up to 20 meters
- R AS9100 Certified (Based on, including ISO 9001:2000)
- R Non-Lead Model withstands 225°C peak temperature profile.
- R Made in the U.S.A



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} (mV)			Input Voltage Differential - V _{IN} (μA)			Input Current - I _{IL}	Input Current - I _{IH}	Differential Signal Level - V _{OUT}		
	MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	MAX	MAX	MIN	TYP	MAX
TM1062TXDUANL	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	40	150	1200	1300	1500
TM1062TXHUANL	1.35	1.63	1.88	2.07	2.33	2.58	150	800	1200	500	750	1200	1300	1500
TM1062TX3DUANL	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 _{CC} ±10%)	Data Rate - D _R (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
TM1062TXDUANL	232	41	39	3.3V	246	1062	62	94	275	400	-12
TM1062TXHUANL	232	41	39	3.3V	246	1062	62	94	275	400	-12
TM1062TX3DUANL	700	34	30	3.3V	246	1062	62	94	275	400	-12

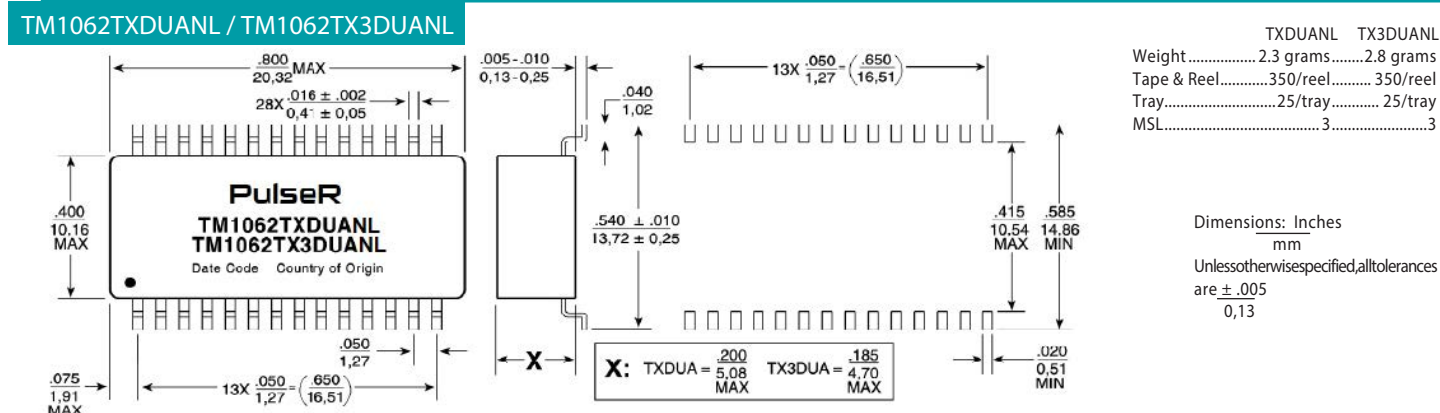
TRANSFORMER COUPLED RECEIVER — Electrical Specifications @ 25°C — Operating Temp. -55°C to +125°C

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		
TM1062TXDUANL	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062TXHUANL	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN
TM1062TX3DUANL	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



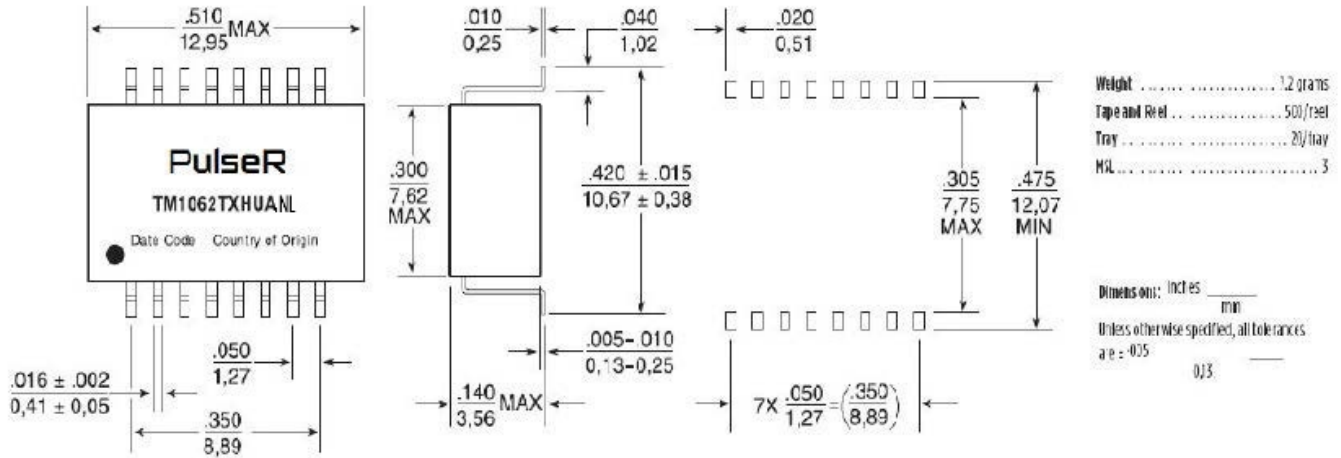
IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Non-Lead Copperhead Series



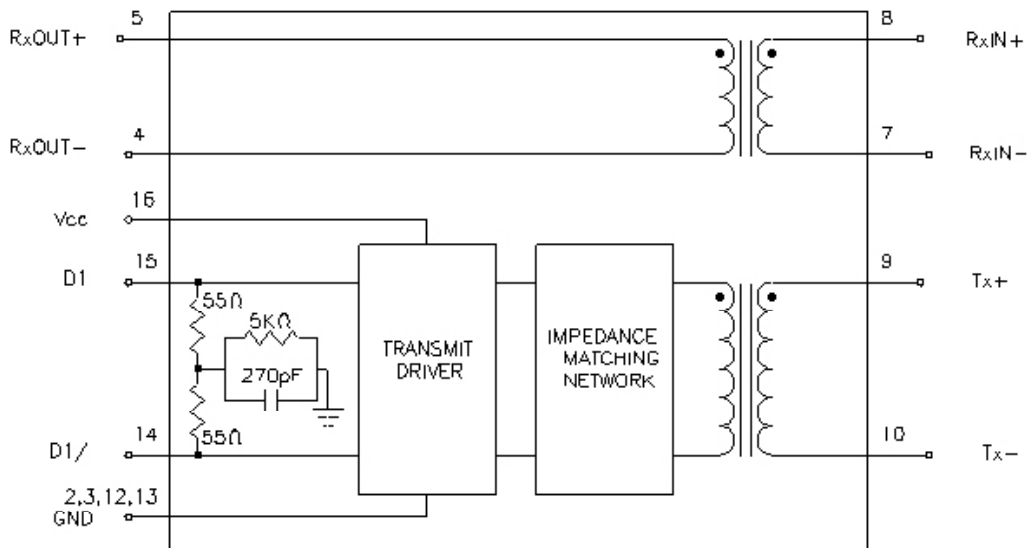
Mechanical

TM1062TXHUANL



Schematic

TM1062TXHUANL

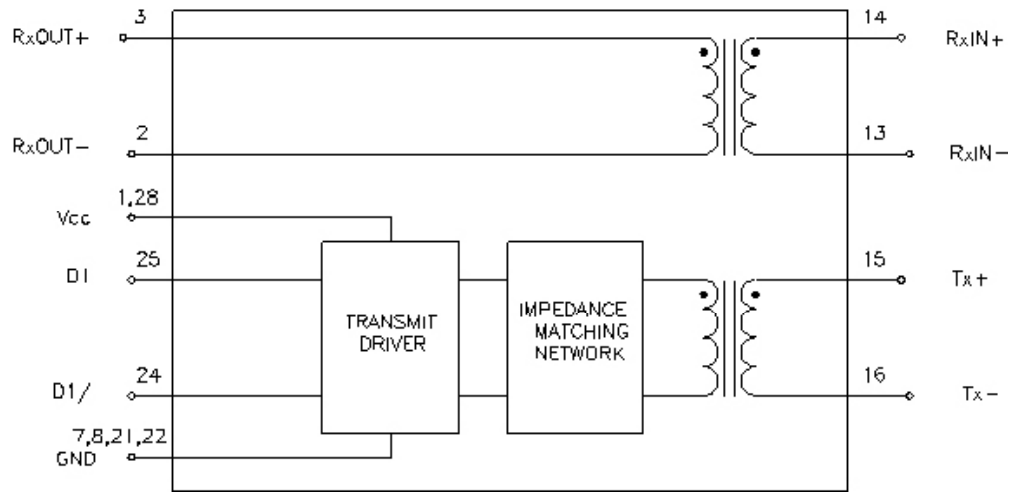


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

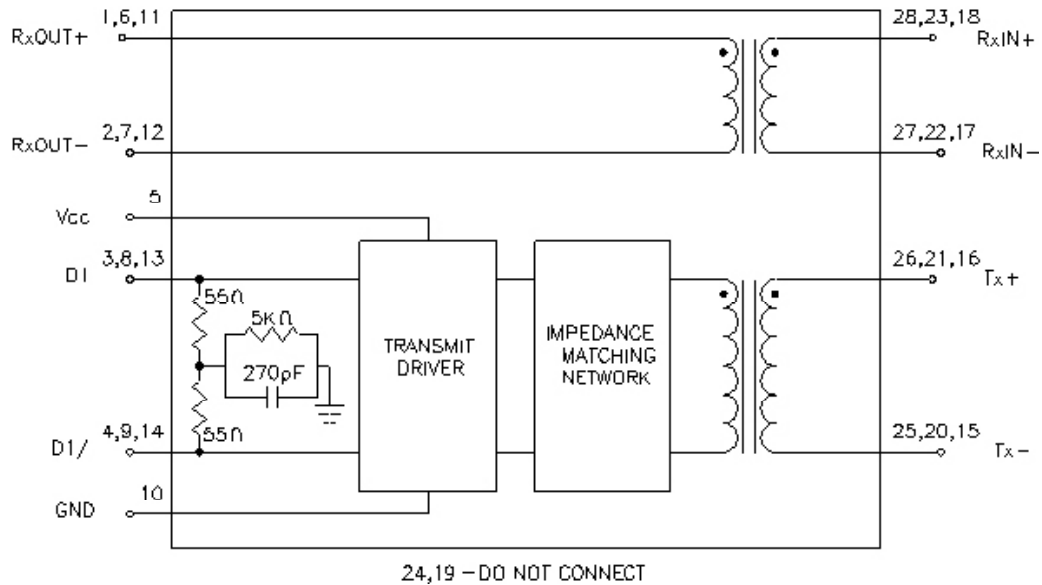
Non-Lead Copperhead Series

Schematics

TM1062TXDUANL



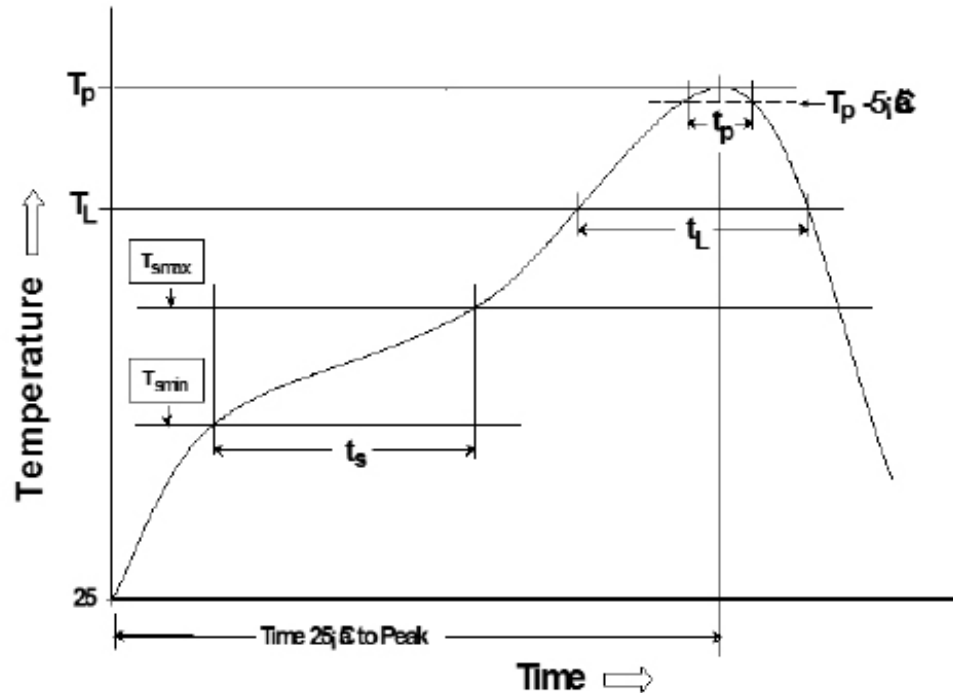
TM1062TX3DUANL



IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Non-Lead Copperhead Series

Transceiver Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_s (s)	t_L (s)	t_p (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
100	150	183	225	60-120	60-150	20	3°C/s MAX	6°C/s MAX	360

Notes:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2.

For More Information

**PulseR North America
Headquarters**
311 Sinclair Road
Bristol, PA
19007 - USA

Tel: +1.215.781.6400
Fax: +1.215.781.6403

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, 2019. PulseR, LLC. All rights reserved.