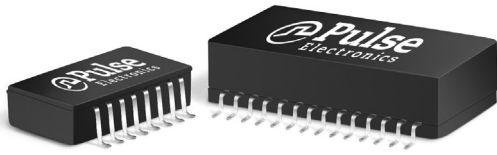


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

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 USA

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		
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		
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)		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
TM1062TXDUA	232	41	39	3.3V	246	1062	62	94	275	400	-12
TM1062TXHUA	232	41	39	3.3V	246	1062	62	94	275	400	-12
TM1062TX3DUA	700	34	30	3.3V	246	1062	62	94	275	400	-12

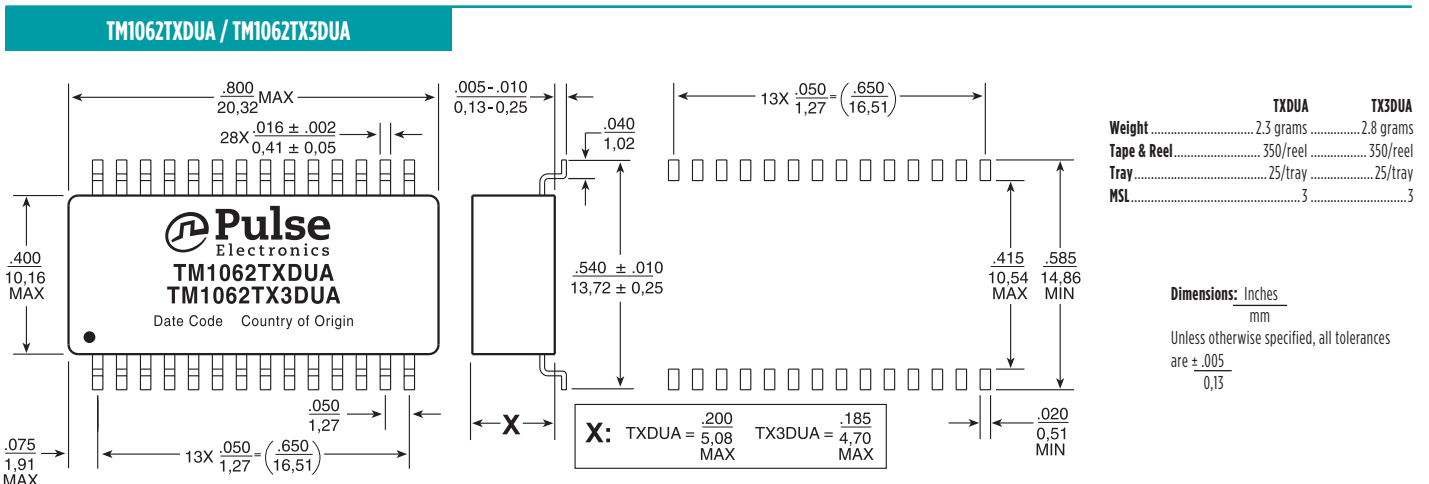
TRANSFORMER COUPLED RECEIVER — Electrical Specifications @ 25°C — Operating Temp. -55°C to +125°C

Part Number	Turns Ratio	Primary Inductance - L _p (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
TM1062TX3DUA	1:1	4.5	300	246	1062	0.2	-2 MAX	-12 MIN

* At 1062 Mb/s data rate

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

Mechanical

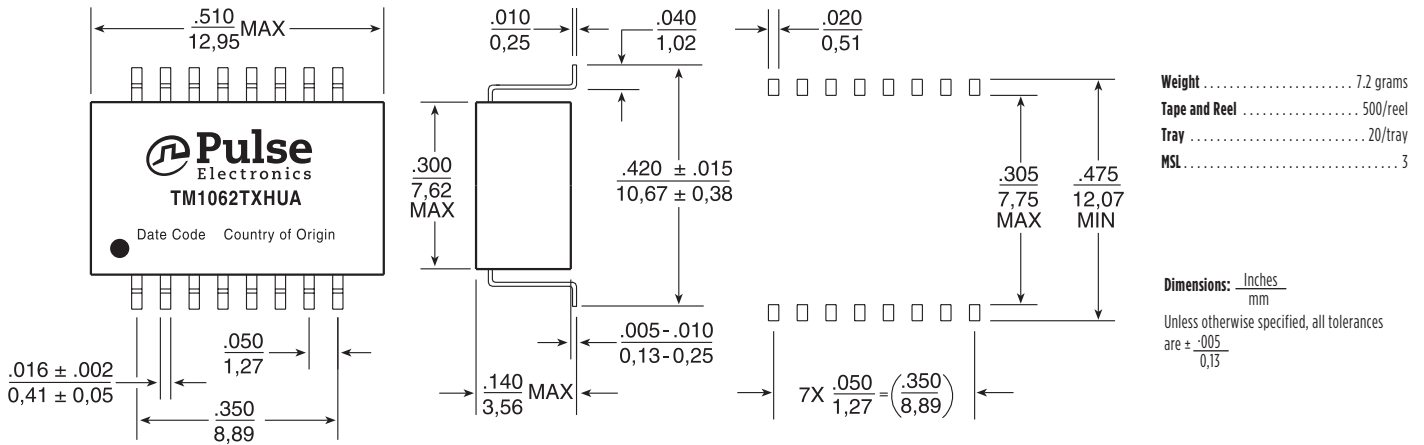


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

Copperhead Series

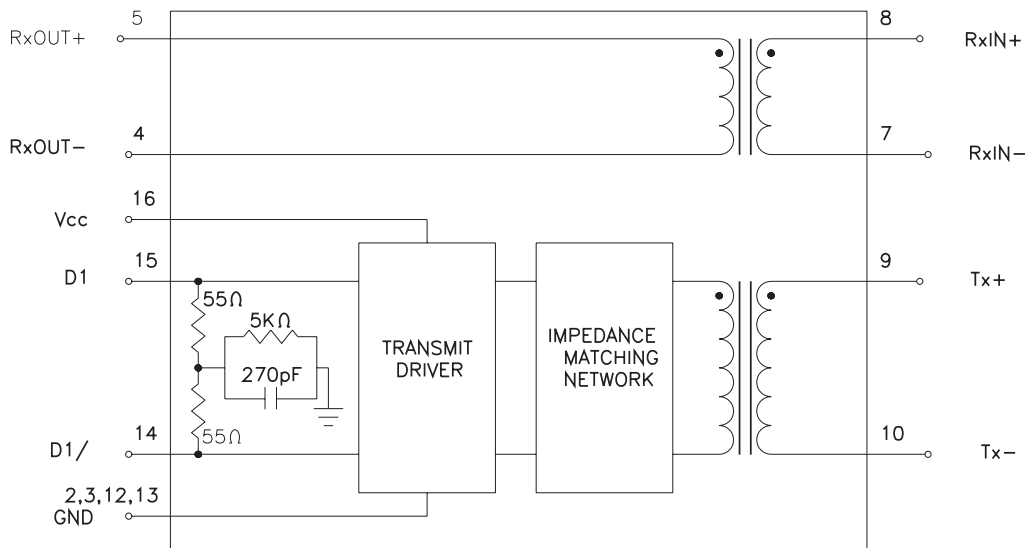
Mechanical

TM1062TXHUA



Schematic

TM1062TXHUA

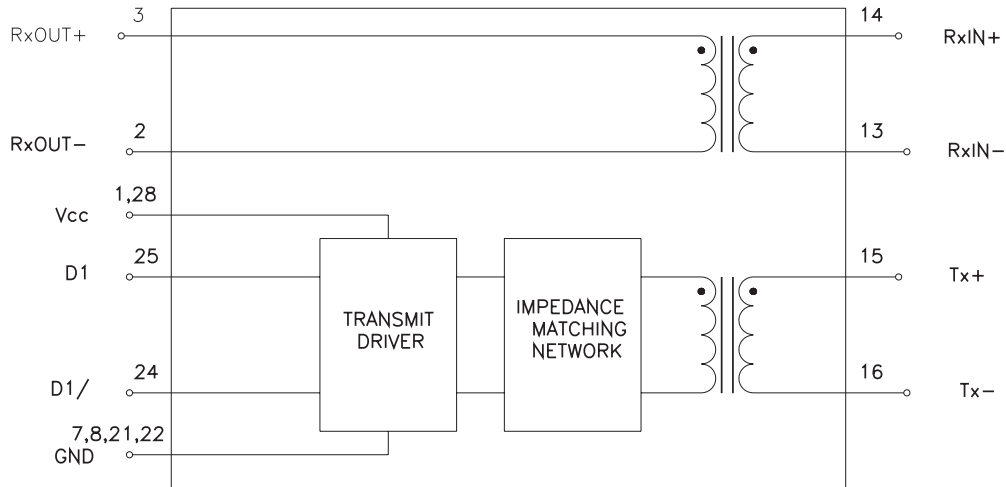


IEEE 1394B Firewire 1.062Gb Transceiver Line Interface Module

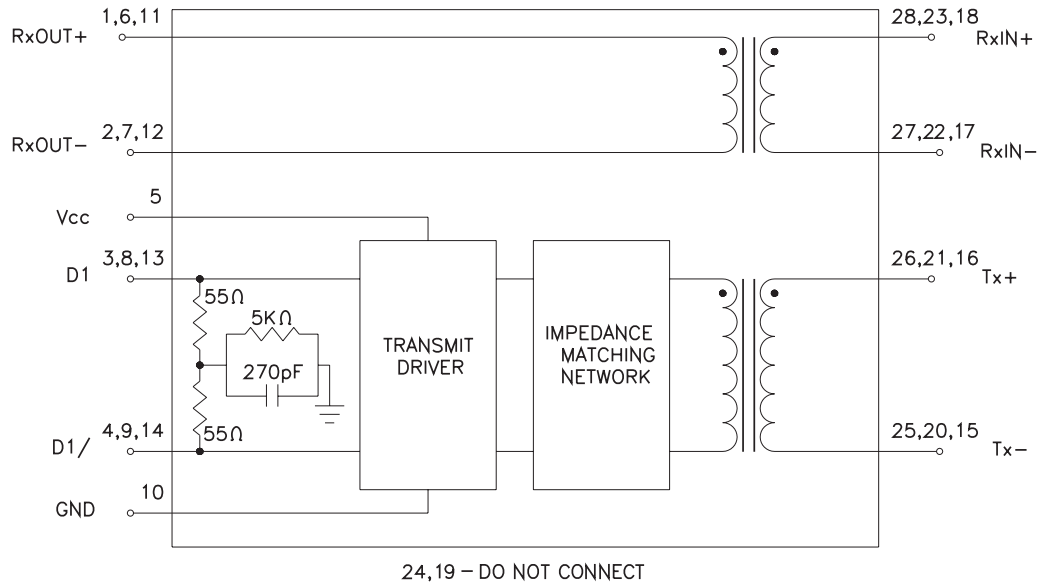
Copperhead Series

Schematics

TM1062TXDUA



TM1062TX3DUA



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