MIL-STD-1553 Transformers

Value Series (COTS) THT $\underline{\text{non-QPL}}$ Interface Transformers. Ruggedized



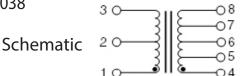
QPL COTS

Operating Temp.	Prefix	
0° to 70°C	С	
-40° to +85°C	N	
-55° to +125°C	TQ	

Summary Performance Specifications		
Impedance	(see table below)	
Droop	□ 20%	
Overshoot	±1V MAX	
Common Mode Rejection (CMR)	□ 45dB	
Frequency Range (no load)	75kHz to 1MHz	
Operating Temperature Range	(see table above)	
Weight	☐ 5 grams	
Insulation Resistance (MIN)	10K MΩ @ 250Vdc	
Dielectric Withstanding Voltage	100Vrms	

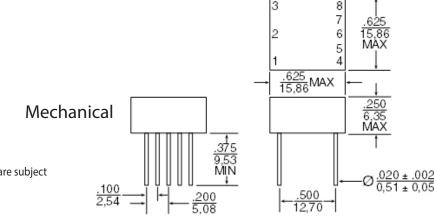
These non-QPL interface transformers are built and tested in ISO 9001 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27. Choose one of three operating temperature ranges including 0° to $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.

- Dual ratio, single interface (see schematic)
- Through-the-board package
- Moisture Sensitivity Level: 1
- For use in MIL-STD-1553 applications
- Results of the Standard height: 0.250 in.
- Performance to MIL-PRF-21038 requirements
- Built in ISO 9001 facility
- Applicable specifications:
 - n MIL-STD-1553B
 - n MIL-STD-202
 - n MIL-PRF-21038
 - n ISO 9001



Characteristics					
Part Number	Termimals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)	
(X)1553-1 ¹	1-3 : 4-8	1CT:1CT	1-3 = 3.0	(1-3)	
	1-3 : 5-7	1CT:.707CT	4-8 = 3.0	4,000	
(X)1553-2	1-3 : 4-8	1.4CT:1CT	1-3 = 3.5	(1-3)	
	1-3 : 5-7	2CT:1CT	4-8 = 3.0	7,200	
(X)1553-3	1-3 : 4-8	1.25CT:1CT	1-3 = 3.2	(1-3)	
	1-3 : 5-7	1.66CT:1CT	4-8 = 3.0	4,000	
(X)1553-5 ²	1-3 : 4-8	1CT:2.12CT	1-3 = 1.0	(4-8)	
	1-3 : 5-7	1CT:1.5CT	4-8 = 3.5	4,000	
(X)1553-45 ²	1-3 : 4-8	1CT:2.5CT	1-3 = 1.0	(4-8)	
	1-3 : 5-7	1CT:1.79CT	4-8 = 3.5	4,000	

NOTE: 1. Refer to prefix table (above) to select temperature range. 2. Designed for transceivers utilizing a single supply voltage (+5V).



3. All specifications and dimensions are subject to change without notice.

1. All dimensions: in inches. 2. Tolerances: .xx = +.008

www.pulseruggedized.com

M233.D (06/19)

Notes:

MIL-STD-1553 Transformers Value Series (COTS) THT non-QPL Interface Transformers.



RWIL-PRF-21038/27 Inspection, Sampling, Testing

	Table 1 — Group A Inspection				
Level	"C"**	Level "M"		Level "T"	
Tests	Sampling Plan	Tests	Sampling Plan	Tests	Sampling Plan
N/A	N/A	Electrical Characteristics per MIL-PRF-21038/27	Sample per Table 3	Thermal Shock	100%
N/A	N/A	Visual and Mechanical Inspection	Sample per Table 3	Winding Continuity	100%
N/A	N/A	N/A	N/A	Electrical Characteristic per MIL-PRF-21038/27	100%
N/A	N/A	N/A	N/A	Impedance	Sample per Table 3
N/A	N/A	N/A	N/A	Visual and Mechanical Inspection	Sample per Table 3

Table 2 — Group B Inspection					
Level	"C"**	Level "M"		Level "T"	
Tests	Sampling Plan	Tests	Sampling Plan	Tests	Sampling Plan
N/A	N/A	Dielectric Withstanding Voltage	Sample per Table 3	Dielectric Withstanding Voltage	Sample per Table 3
N/A	N/A	Insulation Resistance	Sample per Table 3	Insulation Resistance	Sample per Table 3

	Table 3 — Sampling Plans for Group A and Group B Inspections	
Lot Size	Group A, Group II Inspections	Group B
1 to 5	All	All
6 to 13	All	5
14 to 50	13	5
51 to 90	13	7
91 to 150	13	11
151 to 280	20	13
281 to 500	29	16
501 to 1200	34	19
1,201 to 3,200	42	23
3,201 to 10,000	50	29

^{**}NOTE: Parts ordered to Level C are certified to comply with MIL-PRF-21038 Level C, however testing is performed per manufacturer's internal requirements and sampling rates.

For More Information

PulseR North America Headquarters 311 Sinclair Road,-1524 Bristol, PA 19007 U.S.A.

For Global Sales Representatives and Locations Visit: http://www.pulseruggedized.com

Tel: +1.215. 781. 6400 Fax: +1.215. 781. 6403

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.

www.pulseruggedized.com

M233.D (06/19)