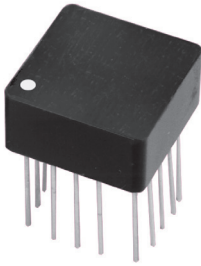


# MIL-STD-1553 Transformers

Stacked Dual THT non-QPL Interface Transformers



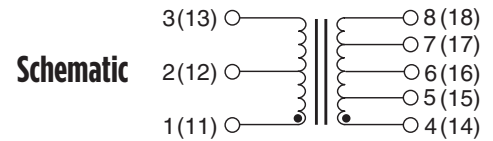
These non-QPL interface transformers are built and tested in ISO 9001 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27. Choose one of three operating temperature ranges including 0° to +70°C, -40° to +85°C, or -55° to +125°C.

Operating Temp.	Prefix
0° to 70°C	STQC
-40° to +85°C	STQN
-55° to +125°C	STQ

- Dual ratio, dual interface (see schematic)
- Through-the-board package
- MSL: 1
- For use in MIL-STD-1553 applications
- Vertically stacked for minimum XY area
- Performance to MIL-PRF-21038 requirements
- Built in ISO 9001 facility
- Applicable specifications:

- MIL-STD-1553B
- MIL-STD-202
- MIL-PRF-21038
- ISO 9001

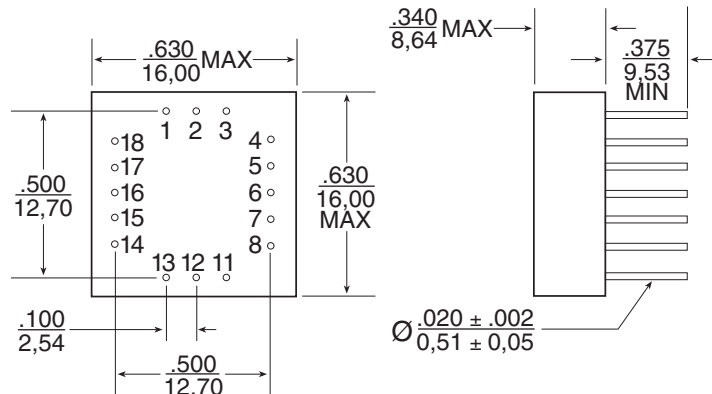
Summary Performance Specifications	
Impedance	(see table below)
Droop	20%
Overshoot	±1V MAX
Common Mode Rejection (CMR)	45dB
Frequency Range (no load)	75kHz to 1MHz
Operating Temperature Range	(see table above)
Weight	5 grams
Insulation Resistance (MIN)	10K MΩ @ 250Vdc
Dielectric Withstanding Voltage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



Characteristics				
Part Number <sup>1</sup>	Terminals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)
(XXXX)1553-1	1-3 : 4-8 (11-13 : 14-18) 1-3 : 5-7 (11-13 : 15-17)	1CT:1CT 1CT:.707CT	1-3 (11-13) = 3.5 4-8 (14-18) = 3.0	(1-3 & 11-13) 4,000
(XXXX)1553-2	1-3 : 4-8 (11-13 : 14-18) 1-3 : 5-7 (11-13 : 15-17)	1.4CT:1CT 2CT:1CT	1-3 (11-13) = 3.0 4-8 (14-18) = 3.0	(1-3 & 11-13) 7,200
(XXXX)1553-3	1-3 : 4-8 (11-13 : 14-18) 1-3 : 5-7 (11-13 : 15-17)	1.25CT:1CT 1.66CT:1CT	1-3 (11-13) = 3.2 4-8 (14-18) = 3.0	(1-3 & 11-13) 4,000
(XXXX)1553-5 <sup>2</sup>	1-3 : 4-8 (11-13 : 14-18) 1-3 : 5-7 (11-13 : 15-17)	1CT:2.12CT 1CT:1.5CT	1-3 (11-13) = 1.0 4-8 (14-18) = 3.5	(4-8 & 14-18) 4,000
(XXXX)1553-45 <sup>2</sup>	1-3 : 4-8 (11-13 : 14-18) 1-3 : 5-7 (11-13 : 15-17)	1CT:2.5CT 1CT:1.79CT	1-3 (11-13) = 1.0 4-8 (14-18) = 3.5	(4-8 & 14-18) 4,000

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

## Mechanical



## MIL-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 Characteristics 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.

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