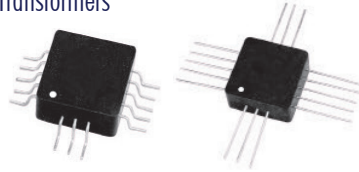


# MIL-STD-1553 TRANSFORMERS

Stacked Dual SMT Non-QPL Interface Transformers  
Ruggedized



These Non-QPL interface transformers are built and tested in ISO 9001 approved facilities.

- ⊗ Dual ratio, dual interface
- ⊗ Surface Mount package
- ⊗ Conform to all electrical and physical parameters of MIL-PRF-21038/27
- ⊗ Moisture Sensitivity Level: 3
- ⊗ Vertically stacked for minimum XY area
- ⊗ Applicable Specifications:
  - ⊗ MIL-STD-1553B
  - ⊗ MIL-STD-202
  - ⊗ MIL-PRF-21038
  - ⊗ ISO 9001

Summary Performance Specifications			
Drop	20% MAX		
Overshoot	±1V MAX		
Common Mode Rejection (CMR)	45dB MIN		
Frequency Range (no load)	75kHz - 1 MHz		
Operating Temperature Range <i>(based on Prefix)</i>	<b>Flat Pack</b>	<b>Gull-Wing</b>	0°C to +70°C -40°C to +85°C -55°C to +125°C
	SFQC	SGQC	
	SFQN	SGQN	
	SFQ	SGQ	
Weight	5 grams MAX		
Insulation Resistance (MIN)	10K MΩ @ 250Vdc		
Dielectric Withstanding Voltage	100Vrms		

## Characteristics

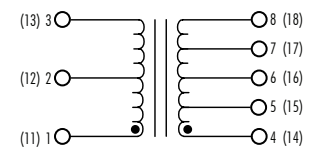
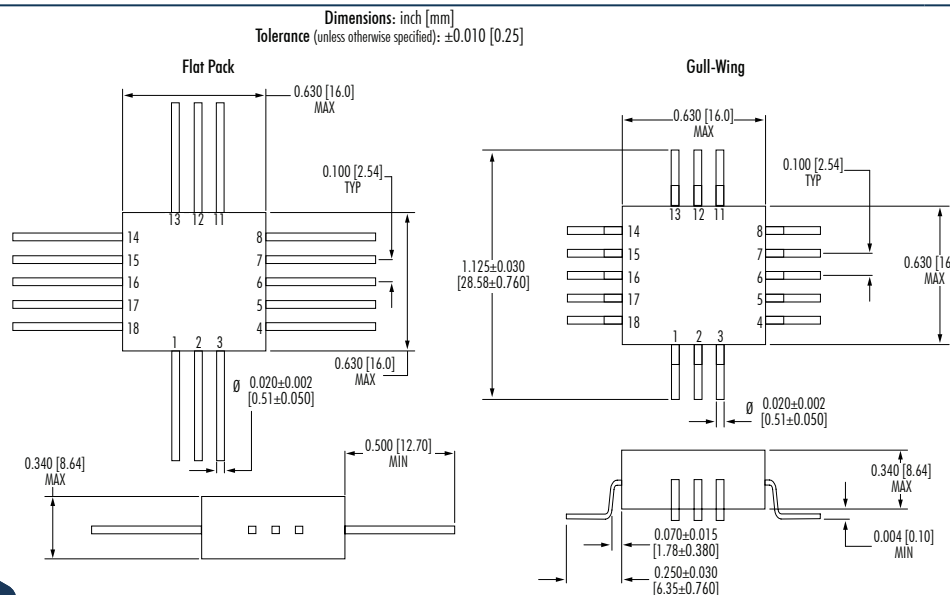
Part Number	Terminals	Ratio	RDC MAX	Impedance MIN
		(±3%)	(Ω)	(Ω)
(XXX)1553-1	1-3:4-8 / 11-13:14-18 1-3:5-7 / 11-13:15-17	1CT:1CT 1CT:0.707CT	1-3, 11-13 = 3.0 4-8, 14-18 = 3.0	(1-3, 11-13) 4,000
(XXX)1553-2	1-3:4-8 / 11-13:14-18 1-3:5-7 / 11-13:15-17	1.40CT:1CT 2CT:1CT	1-3, 11-13 = 3.5 4-8, 14-18 = 3.0	(1-3, 11-13) 7,200
(XXX)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
(XXX)1553-5*	1-3:4-8 / 11-13:14-18 1-3:5-7 / 11-13:15-17	1CT:2.12CT 1CT:1.50CT	1-3, 11-13 = 1.0 4-8, 14-18 = 3.5	(4-8, 14-18) 4,000
(XXX)1553-45*	1-3:4-8 / 11-13:14-18 1-3:5-7 / 11-13:15-17	1CT:2.50CT 1CT:1.79CT	1-3, 11-13 = 1.0 4-8, 14-18 = 3.5	(4-8, 14-18) 4,000

### NOTES:

1. Refer to the Summary Performance Specifications Table above to select the prefix for your desired Operating Temperature Range. Replace (XXX) from the part number in the table with the desired prefix: SFQC, SFQN, SFQ, SGQC, SGQN, SGQ.
- \* Designed for transceivers utilizing a single supply voltage (+5V).

### Mechanicals

### Electrical Schematics



# MIL-STD-1553 TRANSFORMERS

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## 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 & 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 & 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 1,200	34	19
1,201 to 3,200	42	23
3,201 to 10,000	50	29

\*\* 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.

