## **MIL-STD-1553 Transformers**

Low Profile SMT Non-QPL InterfaceTransformers





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			
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc			
Dielectric Withstanding Voltage	100Vrms			

- Dual ratio, single interface (see Schematic)
- Surface Mount, flat pack or gull wing package
- Moisture Sensitivity Level: 3
- For use in MIL-STD-1553 applications
- Low profile, 0.155 inches height
- Performance to MIL-PRF-21038 requirements
- Available Specifications: MIL-STD-1553B, MIL-STD-202, MIL-PRF-21038, ISO 9001

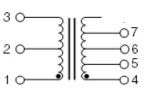
### Choose 1 of 3 Operating Temp. Ranges:

Operating Temperature	Flat Pack Prefix	Gull Wing Prefix
0° to 70°C	FLC	GLC
-40° to +85°C	FLN	GLN
-55° to +125°C	FL	GL

Characteristics					
Part Number <sup>1</sup>	Termimals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)	
(XXX)1553-1	1-3 : 4-8	1CT:1CT	1-3 = 3.0	(1-3)	
	1-3 : 5-7	1CT:.707CT	4-8 = 3.0	4,000	
(XXX)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	
(XXX)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	
(XXX)1553-5 <sup>2</sup>	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	
(XXX)1553-45 <sup>2</sup>	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	

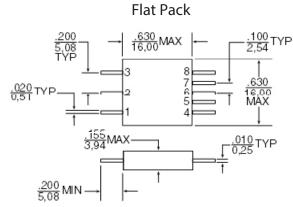
NOTE: 1. Refer to prefix table (above) to select temperature range. 2. Designed for transceivers utilizing a single supply voltage (+5V).

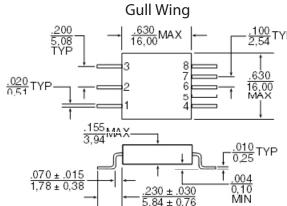
# Schematic Mechanical



#### Notes:

- 1. All dimensions: in inches.
- 2. Tolerances: .xx = +.008
- 3. All specifications and dimensions are subject to change without notice.







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



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