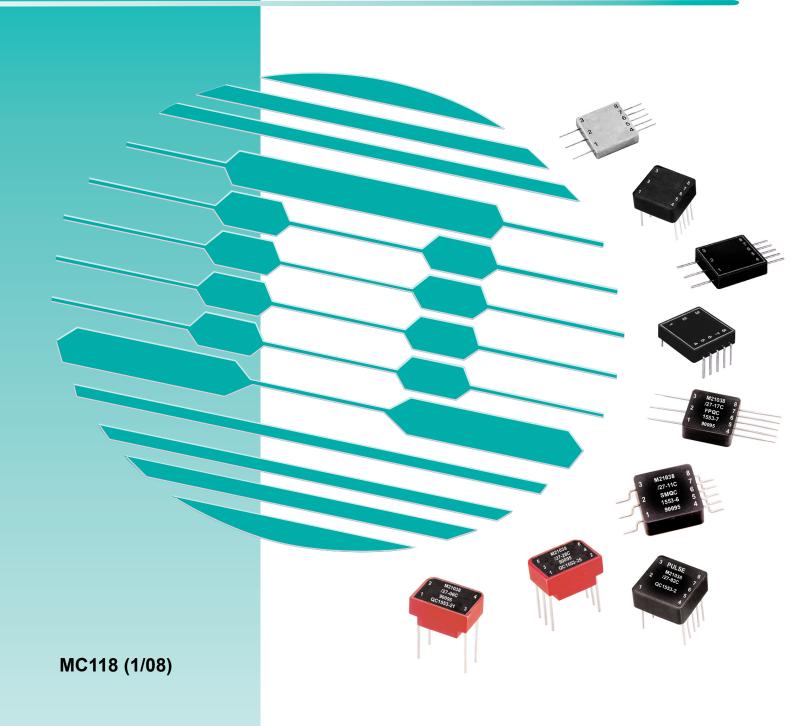


Military-Aerospace Division

# Prospace MIL-STD-1553 Division

**Interface Transformers** 





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# MIL-STD-1553 TRANSFORMERS QPL Interface Transformers Overview



#### **QPL MIL-STD-1553 Interface Transformers**

As "Technitrol Components Division," we were the first to achieve QPL status for MIL-STD-1553B interface transformers, also known as low-power pulse transformers. Today, as "Pulse Military Aerospace Division," our QPL transformer line includes a wide selection of products for each of the product levels called for by MIL-PRF-21038/27, formerly MIL-T-21038/27.

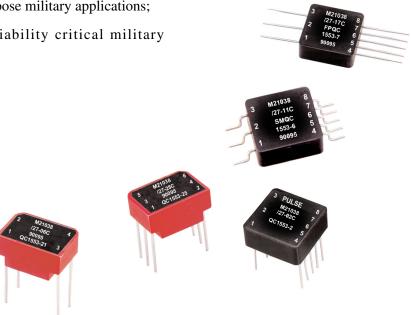
We also were the first to achieve QPL status on surfacemount MIL-STD-1553 pulse transformers -- more than 20 years ago. To this day, many manufacturers have difficulty producing components that can survive the high-heat rigors of surface mounting and the performance, reliabliability, part-to-part repeatibility, and lifespan required by high-rel military and commercial applications.

The first several pages of this catalog cover all of our QPL transformer products. Each part has a military designation number (found on DESC/DSCC approved drawings) as well as our own product number. These part numbers are listed in the specification tables.

MIL-PRF-21038E (8 July 1998) supersedes MIL-T-21038D (11 May 1979) and establishes three product levels for low power pulse transformers. The new specification allows designers to select a QPL device and limit the testing to what is needed for the application:

- Level C for high reliability commercial/industrial applications;
- Level M for general purpose military applications;
- Level T for high reliability critical military applications.

Level C parts are tested to our internal specifications. Group A or B testing is not performed on Level C parts. Level M parts is exactly the same as the original QPL product that was defined by the earlier MIL-T-21038/27 specification. Level T part receives the most extensive testing along with thermal cycling. For information about testing to selected levels, see next page.



# MIL-STD-1553 TRANSFORMERS QPL Interface Transformers Overview



### MIL-PRF-21038/27 Inspection, Sampling, Testing

Table 1 — Group A Inspection								
Level	"C"**	Leve	I "M"	l "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	Winding Contin		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"**	Leve	l "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					

<sup>\*\*</sup>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.

# MIL-STD-1553 TRANSFORMERS Single Ratio THT QPL Pulse Transformers





- Qualified for use in QPL MIL-STD-1553 applications
- Single ratio packages (see Schematics)
- Designed, built, and tested to MIL-PRF-21038
   Levels\* C, M, and T
- Package C is 4-lead; package D is 6-lead (center tap)
- Built in ISO 9001 facility
- Applicable specifications
  - MIL-STD-1553B
  - MIL-STD-202
  - MIL-PRF-21038
  - ISO 9001
    - \* Level C for high reliability commercial/industrial applications
    - Level M for general purpose military applications
    - Level T for high reliability critical military applications

<b>Summary Performance Specifications</b>						
Impedance (see table belo						
Droop	≤ 20%					
Overshoot	±1V MAX					
Common Mode Rejection (CMR)	≥ 45dB					
Frequency Range (no load)	75kHz to 1MHz					
Operating Temperature Range	-55°C to 130°C					
Weight	≤5 grams					
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc					
Dielectric Withstanding Voltage 100Vrm						

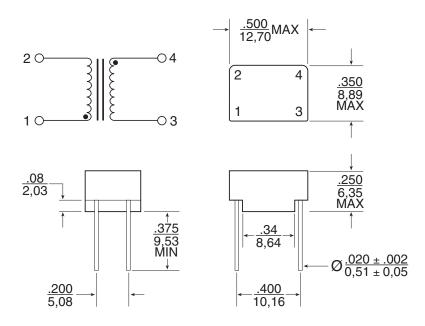
	Characteristics								
Line	Level	Military Designation No.	Pulse Part No.	Package	Height (in. MAX)	Terminals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)
1	С	M21038/27-05C	QC1553-20					1-2 2.2	(4.0)
2	М	M21038/27-05	Q1553-20	С	.250	1-2:4-3	1:1.41	1-2 2.2 4-3 2.7	(4-3) 3,000
3	T	M21038/27-05T	QT1553-20					4-3 2.7	3,000
4	С	M21038/27-06C	QC1553-21					1-5 2.5	(0.0)
5	М	M21038/27-06	Q1553-21	D	.250	1-5:6.2	1CT:1CT	6-2 2.8	(6-2) 3,000
6	T	M21038/27-06T	QT1553-21					0-2 2.0	3,000
7	С	M21038/27-07C	QC1553-22					1-5 2.2	(0.0)
8	М	M21038/27-07	Q1553-22	D	.250	1-5:6.2	1CT:1.41CT	1-5 2.2 6-2 2.7	(6-2) 3,000
9	T	M21038/27-07T	QT1553-22					0-2 2.1	3,000
10	С	M21038/27-08C	QC1553-23					45 45	(0.0)
11	М	M21038/27-08	Q1553-23	D	.250	1-5:6.2	1CT:1.66CT	1-5 1.5 6-2 2.4	(6-2) 3,000
12	T	M21038/27-08T	QT1553-23					0-2 2.4	
13	С	M21038/27-09C	QC1553-24					1-5 1.3	(0.0)
14	М	M21038/27-09	Q1553-24	D	.250	1-5:6.2	1CT:2CT	6-2 2.6	(6-2) 3,000
15	T	M21038/27-09T	QT1553-24					0-2 2.0	3,000
16	С	M21038/27-28C	QC1553-25*					1-3 0.90	(6.0)
17	М	M21038/27-28	Q1553-25*	D	.250	1-5:6.2	1CT:1.5CT	6-2 2.5	(6-2) 3,000
18	T	M21038/27-28T	QT1553-25*					0-2 2.5	3,000
19	С	M21038/27-29C	QC1553-51*					4.5.000	(0.0)
20	М	M21038/27-29	Q1553-51*	D	.250	1-5:6.2	1CT:1.79CT	1-5 0.90 6-2 2.5	(6-2) 3,000
21	Т	M21038/27-29T	QT1553-51*					0-2 2.5	3,000
22	С	M21038/27-30C	QC1553-52*					15.10	(0.0)
23	М	M21038/27-30	Q1553-52*	D	.250	1-5:6.2	1CT:2.5CT	1-5 1.0 6-2 2.8	(6-2) 3,000
24	Т	M21038/27-30T	QT1553-52*					0-2 2.0	3,000

<sup>\*</sup>NOTE: Designed for transceivers utilizing a single supply voltage (+5V).

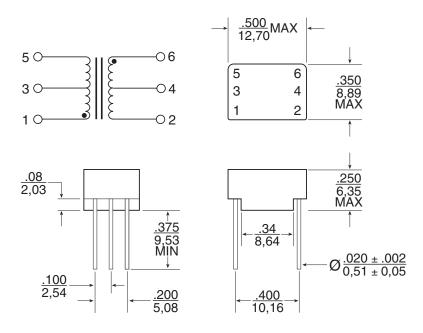
# MIL-STD-1553 TRANSFORMERS Single Ratio THT QPL Pulse Transformers



### Package C



### Package D



#### Notes:

- 1. All dimensions are in inches.
- 2. Tolerances: .xx = +.010, .xxx = +.008
- 3. All specifications and dimensions are subject to change without notice.

# MIL-STD-1553 TRANSFORMERS Dual Ratio THT QPL Pulse Transformers



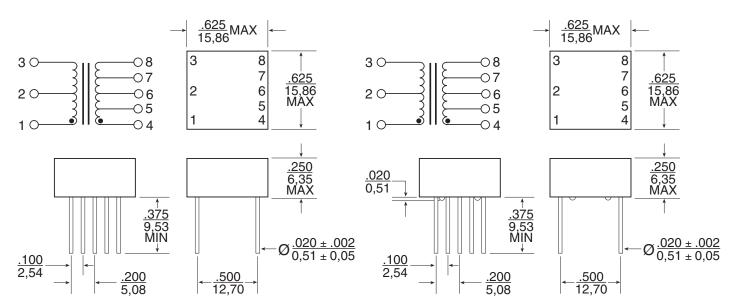


- Qualified for use in QPL MIL-STD-1553 applications
- Dual ratio in a single package (see Schematic)
- Designed, built, and tested to MIL-PRF-21038
   Levels\* C, M, and T
- Two packages available: Package A without standoffs, and Package G with standoffs
- Built in ISO 9001 facility
- Applicable specifications
  - MIL-STD-1553B
  - MIL-STD-202
  - MIL-PRF-21038
  - ISO 9001
    - \* Level C for high reliability commercial/industrial applications
    - Level M for general purpose military applications
    - Level T for high reliability critical military applications

Package G

**Summary Performance Specifications Impedance** (see next page) Droop ≤ 20% Overshoot ±1V MAX ≥ 45dB Common Mode Rejection (CMR) Frequency Range (no load) 75kHz to 1MHz -55°C to 130°C **Operating Temperature Range** Weight ≤5 grams 10K MΩ @ 250Vdc **Insualtion Resistance (MIN) Dielectric Withstanding Voltage** 100Vrms

### Package A



#### Notes:

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

# MIL-STD-1553 TRANSFORMERS Dual Ratio THT QPL Pulse Transformers



Characteristics									
Line	Level	Military Designation No.	Pulse Part No.	Package	Height (in. MAX)	Terminals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)
1	С	M21038/27-01C	QC1553-1			1-3:4-8	1CT:1CT	1-3 3.0	(1-3)
2	М	M21038/27-01	Q1553-1	Α	.250	1-3:5-7	1CT:.707CT	4-8 3.0	4,000
3	Т	M21038/27-01T	QT1553-1			1 0.0 7	10170701	10 0.0	1,000
4	С	M21038/27-02C	QC1553-2			1-3:4-8	1.4CT:1CT	1-3 3.5	(1-3)
5	М	M21038/27-02	Q1553-2	Α	.250	1-3:5-7	2CT:1CT	4-8 3.0	7,200
6	Т	M21038/27-02T	QT1553-2			. 5.5 /	2011101		.,_00
7	С	M21038/27-03C	QC1553-3			1-3:4-8	1.25CT:1CT	1-3 3.2	(1-3)
8	М	M21038/27-03	Q1553-3	Α	.250	1-3:5-7	1.66CT:1CT	4-8 3.0	4,000
9	Т	M21038/27-03T	QT1553-3			1 0.0 7	1.00011101	10 0.0	1,000
10	С	M21038/27-10C	QC1553-5*			1-3:4-8	1CT:2.12CT	1-3 1.0	(4-8)
11	М	M21038/27-10	Q1553-5*	Α	.250	1-3:5-7	1CT:1.5CT	4-8 3.5	4,000
12	Т	M21038/27-10T	QT1553-5*			1-0.5-7	101111001	10 0.0	1,000
13	С	M21038/27-21C	QC1553-81			1-3:4-8	1CT:1CT	1-3 3.0	(1-3)
14	М	M21038/27-21	Q1553-81	G	.275	1-3:5-7	1CT:.707CT	4-8 3.0	4,000
15	Т	M21038/27-21T	QT1553-81			1 0.0 7	10170701		,
16	С	M21038/27-22C	QC1553-82			1-3:4-8	1.4CT:1CT	1-3 3.5	(1-3)
17	М	M21038/27-22	Q1553-82	G	.275	1-3:5-7	2CT:1CT	4-8 3.0	7,200
18	Т	M21038/27-22T	QT1553-82			. 5.5 /	2011101	. 0 0.0	.,
19	С	M21038/27-23C	QC1553-83			1-3:4-8	1.25CT:1CT	1-3 3.2	(1-3)
20	М	M21038/27-23	Q1553-83	G	.275	1-3:5-7	1.66CT:1CT	4-8 3.0	4,000
21	Т	M21038/27-23T	QT1553-83			1 0.0 7	1.00011101	10 0.0	1,000
22	С	M21038/27-24C	QC1553-84*			1-3:4-8	1CT:2.12CT	1-3 1.0	(4-8)
23	М	M21038/27-24	Q1553-84*	G	.275	1-3:5-7	1CT:1.5CT	4-8 3.5	4,000
24	Т	M21038/27-24T	QT1553-84*			1 0.0 7	101.1.001	40 0.0	4,000
25	С	M21038/27-25C	QC1553-85*			1-3:4-8	1CT:2.50CT	1-3 1.0	(4-8)
26	М	M21038/27-25	Q1553-85*	G	.275	1-3:5-7	1CT:1.79CT	4-8 3.5	4,000
27	Т	M21038/27-25T	QT1553-85*			1 0.0 7	131.1.7001	T 0 0.0	4,000
28	С	M21038/27-26C	QC1553-45*			1-3:4-8	1CT:2.50CT	1-3 1.0	(4-8)
29	М	M21038/27-26	Q1553-45*	Α	.250	1-3:5-7	1CT:1.79CT	4-8 3.5	(4-8) 4,000
30	Т	M21038/27-26T	QT1553-45*			, 5.5 ,	101.7.7001	1 0 0.0	1,000

\*NOTE: Designed for transceivers utilizing a single supply voltage (+5V).

# MIL-STD-1553 TRANSFORMERS Dual Ratio SMT QPL Pulse Transformers







- Qualified for use in QPL MIL-STD-1553 applications
- Dual ratio in a single package (see Schematic)
- Designed, built, and tested to MIL-PRF-21038
   Levels\* C, M, and T
- Two packages available: Package B has gull-wing leads, and Package F is flat pack
- Built in ISO 9001 facility
- Applicable specifications
  - MIL-STD-1553B
  - MIL-STD-202
  - MIL-PRF-21038
  - ISO 9001
    - Level C for high reliability commercial/industrial applications
    - Level M for general purpose military applications
    - Level T for high reliability critical military applications

Summary Performance Specifications					
Impedance	(see next page)				
Droop	≤ 20%				
Overshoot	±1V MAX				
Common Mode Rejection (CMR)	≥ 45dB				
Frequency Range (no load)	75kHz to 1MHz				
Operating Temperature Range	-55°C to 130°C				
Weight	≤5 grams				
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc				
Dielectric Withstanding Voltage	100Vrms				

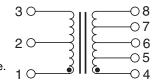
#### Package B

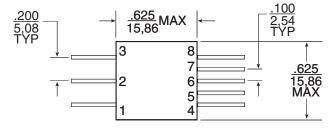
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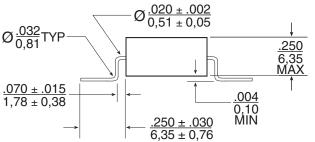
#### Notes:

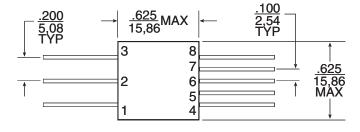
- 1. All dimensions are in inches.
- 2. Tolerances: .xx = +.008
- 3. All specifications and dimensions are subject to change without notice.

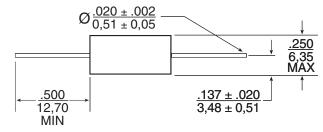
#### Package F











# MIL-STD-1553 TRANSFORMERS Dual Ratio SMT QPL Pulse Transformers



	Characteristics								
Line	Level	Military Designation No.	Pulse Part No.	Package	Height (in. MAX)	Terminals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)
1	С	M21038/27-11C	SMQC1553-6			1-3:4-8	1CT:1CT	1-3 3.0	(1-3)
2	М	M21038/27-11	SMQ1553-6	В	.250	1-3:5-7	1CT:.707CT	4-8 3.0	4,000
3	Т	M21038/27-11T	SMQT1553-6			1 0.0 7	10170701	40 0.0	4,000
4	С	M21038/27-12C	SMQC1553-7			1-3:4-8	1.4CT:1CT	1-3 3.5	(1-3)
5	М	M21038/27-12	SMQ1553-7	В	.250	1-3:5-7	2CT:1CT	4-8 3.0	7,200
6	Т	M21038/27-12T	SMQT1553-7			1 0.0 7	2011101	10 0.0	7,200
7	С	M21038/27-13C	SMQC1553-8			1-3:4-8	1.25CT:1CT	1-3 3.2	(1-3)
8	М	M21038/27-13	SMQ1553-8	В	.250	1-3:5-7	1.66CT:1CT	4-8 3.0	4,000
9	Т	M21038/27-13T	SMQT1553-8			1 0.0 7	1.0001.101	40 0.0	4,000
10	С	M21038/27-15C	SMQC1553-10*			1-3:4-8	1CT:2.12CT	1-3 1.0	(4-8)
11	М	M21038/27-15	SMQ1553-10*	В	.250	1-3:5-7	1CT:1.5CT	4-8 3.5	4,000
12	Т	M21038/27-15T	SMQT1553-10*			1 0.0 7	101.11.001	10 0.0	1,000
13	С	M21038/27-16C	FPQC1553-6			1-3:4-8	1CT:1CT	1-3 3.0	(1-3)
14	М	M21038/27-16	FPQ1553-6	F	.250	1-3:5-7	1CT:.707CT	4-8 3.0	4,000
15	Т	M21038/27-16T	FPQT1553-6			1 0.0 7	10170701	. 0 0.0	-,
16	С	M21038/27-17C	FPQC1553-7			1-3:4-8	1.4CT:1CT	1-3 3.5	(1-3)
17	М	M21038/27-17	FPQ1553-7	F	.250	1-3:5-7		4-8 3.0	7,200
18	Т	M21038/27-17T	FPQT1553-7			1 0.0 7	2011101	10 0.0	7,200
19	С	M21038/27-18C	FPQC1553-8			1-3:4-8	1.25CT:1CT	1-3 3.2	(1-3)
20	М	M21038/27-18	FPQ1553-8	F	.250	1-3:5-7	1.66CT:1CT	4-8 3.0	4,000
21	Т	M21038/27-18T	FPQT1553-8			1 0.0 7	1.00011101	10 0.0	1,000
22	С	M21038/27-20C	FPQC1553-10*			1-3:4-8	1CT:2.12CT	1-3 1.0	(4-8)
23	М	M21038/27-20	FPQ1553-10*	F	.250	1-3:5-7	1CT:1.5CT	4-8 3.5	4,000
24	Т	M21038/27-20T	FPQT1553-10*			1 0.0 7	101.11.001	10 0.0	1,000
25	С	M21038/27-27C	SMQC1553-45*			1-3:4-8	1CT:2.50CT	1-3 1.0	(4-8)
26	М	M21038/27-27	SMQ1553-45*	В	.250	1-3:5-7	1CT:1.79CT	4-8 3.5	4,000
27	Т	M21038/27-27T	SMQT1553-45*			1 5.5 7	1011111001		1,500
28	С	M21038/27-31C	FPQC1553-45*			1-3:4-8	1CT:2.50CT	1-3 1.0	(4-8)
29	М	M21038/27-31	FPQ1553-45*	F	.250	1-3:4-6	1CT:1.79CT	4-8 3.5	4,000
30	Т	M21038/27-31T	FPQT1553-45*			7 3.0 7	101.1.7001	1 0 0.0	1,000

\*NOTE: Designed for transceivers utilizing a single supply voltage (+5V).

## **MIL-STD-1553 TRANSFORMERS** non-QPL Interface Transformers Overview



#### **COTS Transformers**

Pulse has developed many low-power pulse transformer products in response to the Perry Initiative and its COTS mandate. Several of our QPL transformers have COTS counterparts. They have the same component layout and electrical characteristics but they're built for commercially-oriented requirements, and manufactured in higher volume at lower cost. We've noted where a COTS counterpart to a QPL product exists with the symbol shown here.



#### **More non-QPL 1553 Transformers**

Other non-QPL pulse transformers available have performance and electrical characteristics compliant with MIL-PRF-21038/27, but have been developed for special applications:

- Low profile for reduced board-stacking height
- Single- ratio and dual-ratio
- Single interface and dual interface
- Vertically stacked dual interface
- $\circ$  0-70°C or -40 to +85°C or -55 to +125°C
- Hermetically sealed for extreme environments



# MIL-STD-1553 TRANSFORMERS non-QPL Interface Transformers Overview





- Low profile
- Dual ratio
- Through-the-board

See page 12



- Low profile
- Dual ratio
- Surface-mount flat pack

See page 13



- Low profile
- Dual ratio
- Surface-mount gull wing

See page 13



- Dual interface
- Low profile
- Dual ratio
- Through-the-board

See page 14



- Dual interface
- Low profile
- Dual ratio
- Surface-mount flat pack

See page 15



- Dual interface
- Low profile
- Dual ratio
- Surface-mount gull wing

See page 15



- Dual interface
- Stacked
- Dual ratio
- Through-the-board

See page 16



- Dual interface
- Stacked
- Dual ratio
- Surface-mount flat pack

See page 17



- Dual interface
- Stacked
- Dual ratio
- Surface-mount gull wing

See page 17

#### **Hermetically Sealed**



- Single interface
- Dual ratio
- Surface-mount flat pack

See page 18

## **Value Series – COTS**



- Standard profile
- Dual-ratio
- Through-the-board

See page 19



The package shown here as "Value Series COTS" is also available fully qualified to MIL-PRF-21038/27 requirements. See page 6



- Dual interface
- Low profile
- Dual ratio
- Through-the-board

See page 20-21



- Dual interface
- Low profile
- Dual ratio
- Surface-mount flat pack

See page 20-21



- Dual interface
- Low profile
- Dual ratio
- Surface-mount gull wing

See page 20-21

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4643715

# MIL-STD-1553 TRANSFORMERS Low Profile THT non-QPL Interface

## Transformers





Operating Temp.	Prefix
0° to 70°C	TLC
-40° to +85°C	TLN
-55° to +125°C	TL

**Dielectric Withstanding Voltage** 

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  $0^{\circ}$  to +70°C, -40° to +85°C, or -55° to +125°C.

- Dual ratio, single interface (see schematic)
- Through-the-board package
- For use in MIL-STD-1553 applications
- Low profile, 0.155 inches height
- Performance to MIL-PRF-21038 requirements
- Built in ISO 9001 facility
- Applicable specifications:

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

Impedance	(see table below)
Droop	≤ 20%
Overshoot	±1V MAX
Common Mode Rejection (CMR)	≥ 45dB
Frequency Range (no load)	75kHz to 1MHz
<b>Operating Temperature Range</b>	(see table above)
Weight	≤5 grams
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc

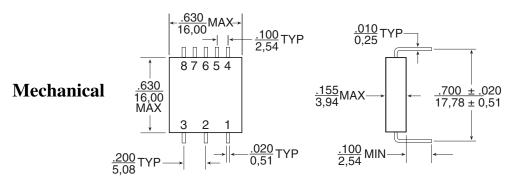
**Summary Performance Specifications** 

	3 0	30—311
Schematic	20	
	1 0	

Characteristics				
Part Number 1	Termimals	Ratio (±3%)	RDC ( $\Omega$ MAX)	Impedance ( $\Omega$ 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).

100Vrms



#### Notes:

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

## MIL-STD-1553 TRANSFORMERS Low Profile SMT non-QPL Interface Transformers





**Operating** 

Temperature

0° to 70°C

-40° to +85°C

-55° to +125°C

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  $0^{\circ}$  to +70°C, -40° to +85°C, or -55° to +125°C.

Dual ratio, single interface (see schematic)

Surface Mount, flat pack or gull wing package

For use in MIL-STD-1553 applications

Low profile, 0.155 inches height

Performance to MIL-PRF-21038 requirements

Built in ISO 9001 facility

Applicable specifications:

MIL-STD-1553B

MIL-PRF-21038

■ MIL-STD-202

ISO 9001

<b>Summary Performance Specifications</b>			
Impedance (see table belo			
Droop	≤ 20%		
Overshoot	±1V MAX		
Common Mode Rejection (CMR)	≥ 45dB		
Frequency Range (no load)	75kHz to 1MHz		
Operating Temperature Range (see table a			
Weight	≤5 grams		
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc		
Dielectric Withstanding Voltage 100V			

Flat Pack

Prefix

**FLC** 

FLN

FL

**Gull Wing** 

Prefix

**GLC** 

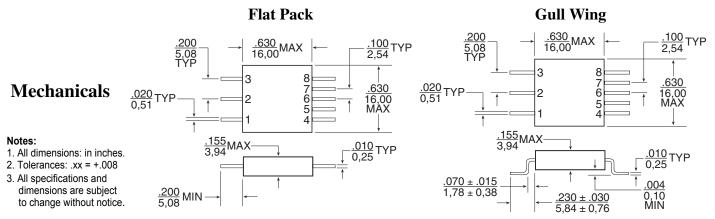
**GLN** 

GL

	30	80—31
Schematic	20	07
	1 0	05

Characteristics				
Part Number <sup>1</sup>	Termimals	Ratio (±3%)	RDC ( $\Omega$ MAX)	Impedance ( $\Omega$ 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).



## **MIL-STD-1553 TRANSFORMERS** Low Profile Dual THT non-QPL Interface **Transformers**





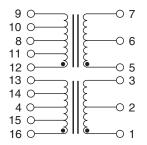
Operating Temp.	Prefix
0° to 70°C	DTLC
-40° to +85°C	DTLN
-55° to +125°C	DTL

-55° to +125°C	DTL	
Summary Per	formance S	pecifications
Impedance		(see table below)
Droop		≤ 20%
Overshoot		±1V MAX
Common Mode Rejec	ction (CMR)	≥ 45dB
Eraguanay Banga (na	· lood\	751/Uz to 1MUz

5	
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

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  $0^{\circ}$  to  $+70^{\circ}$ C,  $-40^{\circ}$  to  $+85^{\circ}$ C, or  $-55^{\circ}$  to  $+125^{\circ}$ C.

- Dual ratio, dual interface (see schematic)
- Through-the-board package
- For use in MIL-STD-1553 applications
- Low profile, 0.155 inches height
- Performance to MIL-PRF-21038 requirements
- Built in ISO 9001 facility
- Applicable specifications:
  - MIL-STD-1553B
  - MIL-STD-202
  - MIL-PRF-21038
  - ISO 9001



**Schematic** 

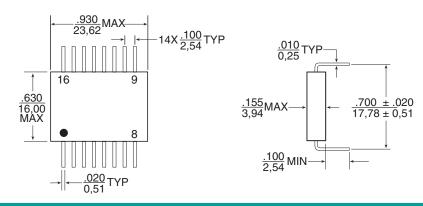
Characteristics				
Part Number 1	Termimals	Ratio (±3%)	RDC (Ω MAX)	Impedance ( $\Omega$ MIN)
(XXXX)1553-1	1-3 : 16-13 / 5-7 : 12-9	1CT:1CT	1-3, 5-7 = 3.0	(1-3, 5-7)
	1-3 : 15-14 / 5-7 : 11-10	1CT:.707CT	16-13, 12-9 = 3.0	4,000
(XXXX)1553-2	1-3 : 16-13 / 5-7 : 12-9	1.4CT:1CT	1-3, 5-7 = 3.5	(1-3, 5-7)
	1-3 : 15-14 / 5-7 : 11-10	2CT:1CT	16-13, 12-9 = 3.0	7,200
(XXXX)1553-3	1-3 : 16-13 / 5-7 : 12-9	1.25CT:1CT	1-3, 5-7 = 3.2	(1-3, 5-7)
	1-3 : 15-14 / 5-7 : 11-10	1.66CT:1CT	16-13, 12-9 = 3.0	4,000
(XXXX)1553-5 <sup>2</sup>	1-3 : 16-13 / 5-7 : 12-9	1CT:2.12CT	1-3, 5-7 = 1.0	(16-13, 12-9)
	1-3 : 15-14 / 5-7 : 11-10	1CT:1.5CT	16-13, 12-9 = 3.5	4,000
(XXXX)1553-45 <sup>2</sup>	1-3 : 16-13 / 5-7 : 12-9	1CT:2.5CT	1-3, 5-7 = 1.0	(16-13, 12-9)
	1-3 : 15-14 / 5-7 : 11-10	1CT:1.79CT	16-13, 12-9 = 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).

# Mechanical

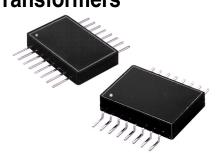
#### Notes:

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



## **MIL-STD-1553 TRANSFORMERS** Low Profile SMT Dual non-QPL Interface **Transformers**





**Operating** 

Temperature

0° to 70°C

-40° to +85°C

-55° to +125°C

**Dielectric Withstanding Voltage** 

Notes:

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  $0^{\circ}$  to  $+70^{\circ}$ C,  $-40^{\circ}$  to  $+85^{\circ}$ C, or  $-55^{\circ}$  to  $+125^{\circ}$ C.

Dual ratio, dual interface (see schematic)

Surface Mount, flat pack or gull wing package

For use in MIL-STD-1553 applications

Low profile, 0.155 inches height

Performance to MIL-PRF-21038 requirements

Built in ISO 9001 facility

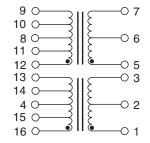
Applicable specifications:

MIL-STD-1553B

MIL-STD-202

MIL-PRF-21038

ISO 9001



Summary Performance Specifications			
Impedance (see table belo			
Droop	≤ 20%		
Overshoot	±1V MAX		
Common Mode Rejection (CMR)			
Frequency Range (no load)	75kHz to 1MHz		
Operating Temperature Range (see table ab			
Weight	≤ 5 grams		
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc		

Flat Pack

Prefix

**DFLC** 

**DFLN** 

**DFL** 

**Gull Wing** 

**Prefix** 

**DGLC** 

**DGLN** 

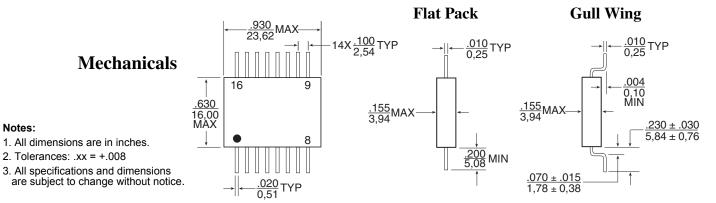
**DGL** 

100Vrms

Schematic
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Characteristics				
Part Number 1	Termimals	Ratio (±3%)	RDC (Ω MAX)	Impedance ( $\Omega$ MIN)
(XXXX)1553-1	1-3 : 16-13 / 5-7 : 12-9	1CT:1CT	1-3, 5-7 = 3.0	(1-3, 5-7)
	1-3 : 15-14 / 5-7 : 11-10	1CT:.707CT	16-13, 12-9 = 3.0	4,000
(XXXX)1553-2	1-3 : 16-13 / 5-7 : 12-9	1.4CT:1CT	1-3, 5-7 = 3.5	(1-3, 5-7)
	1-3 : 15-14 / 5-7 : 11-10	2CT:1CT	16-13, 12-9 = 3.0	7,200
(XXXX)1553-3	1-3 : 16-13 / 5-7 : 12-9	1.25CT:1CT	1-3, 5-7 = 3.2	(1-3, 5-7)
	1-3 : 15-14 / 5-7 : 11-10	1.66CT:1CT	16-13, 12-9 = 3.0	4,000
(XXXX)1553-5 <sup>2</sup>	1-3 : 16-13 / 5-7 : 12-9	1CT:2.12CT	1-3, 5-7 = 1.0	(16-13, 12-9)
	1-3 : 15-14 / 5-7 : 11-10	1CT:1.5CT	16-13, 12-9 = 3.5	4,000
(XXXX)1553-45 <sup>2</sup>	1-3 : 16-13 / 5-7 : 12-9	1CT:2.5CT	1-3, 5-7 = 1.0	(16-13, 12-9)
	1-3 : 15-14 / 5-7 : 11-10	1CT:1.79CT	16-13, 12-9 = 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).



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# MIL-STD-1553 TRANSFORMERS Stacked Dual THT non-QPL Interface Transformers





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

**Dielectric Withstanding Voltage** 

<b>Summary Performance Specifications</b>			
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		

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  $0^{\circ}$  to +70°C, -40° to +85°C, or -55° to +125°C.

- Dual ratio, dual interface (see schematic)
- Through-the-board package
- 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

	3(13) ○	08(18)
Schematic	2(12) 🔾	08 (18) 07 (17) 06 (16) 05 (15) 04 (14)
	1(11) 0	05 (15)

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

100Vrms

#### 

### Mechanical

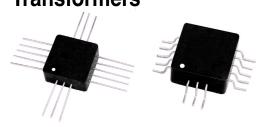
#### Notes

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

12,70

# MIL-STD-1553 TRANSFORMERS Stacked Dual SMT 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  $0^{\circ}$  to +70°C, -40° to +85°C, or -55° to +125°C.

Dual ratio, dual interface (see schematic)

Surface Mount package

For use in MIL-STD-1553 applications
 Vertically stacked for minimum XY area

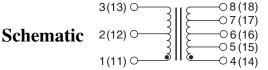
Performance to MIL-PRF-21038 requirements

Built in ISO 9001 facility

Applicable specifications:

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

■ ISO 9001

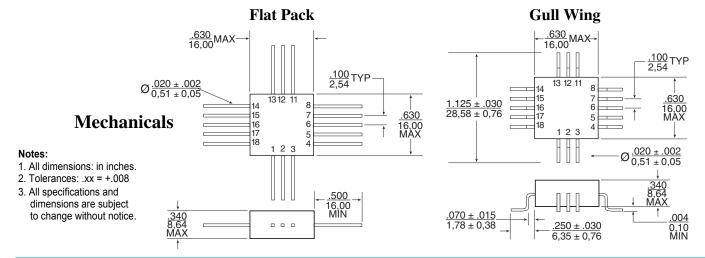


Operating Temperature	Flat Pack Prefix	Gull Wing Prefix
0° to 70°C	SFQC	SGQC
-40° to +85°C	SFQN	SGQN
-55° to +125°C	SFQ	SGQ

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

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

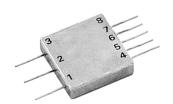
NOTE: 1. Refer to prefix table (above) to select temperature range. 2. Designed for transceivers utilizing a single supply voltage (+5V).



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# MIL-STD-1553 TRANSFORMERS Hermatically-sealed SMT Dual non-QPL Interface Transformers

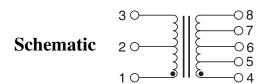




These hermatically sealed non-QPL interface transformers are built and tested in ISO 9001 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27 and provide performance as required over -55° to +125°C.

- Dual ratio, single interface (see schematic)
- Surface Mount, flat pack package
- For use in MIL-STD-1553 applications
- 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	
<b>Operating Temperature Range</b>	-55° to +125°C	
Weight	≤ 5 grams	
Insualtion Resistance (MIN)	10K MΩ @ 250Vdc	
Dielectric Withstanding Voltage	100Vrms	



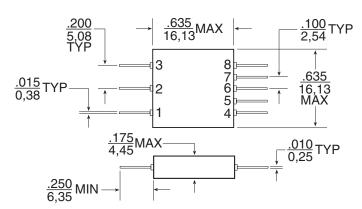
Characteristics				
Part Number	Termimals	Ratio (±3%)	<b>RDC</b> ( $\Omega$ MAX)	Impedance ( $\Omega$ MIN)
H1553-1	1-3 : 4-8	1CT:1CT	1-3 = 3.0	(1-3)
	1-3 : 5-7	1CT:.707CT	4-8 = 3.0	4,000
H1553-2	1-3 : 4-8	1.4CT:1CT	1-3 = 3.5	(1-3)
	1-3 : 5-7	2CT:1CT	4-8 = 3.0	7,200
H1553-3	1-3 : 4-8	1.25CT:1CT	1-3 = 3.2	(1-3)
	1-3 : 5-7	1.66CT:1CT	4-8 = 3.0	4,000
H1553-5 <sup>1</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
H1553-45 <sup>1</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.** Designed for transceivers utilizing a single supply voltage (+5V).

## Mechanical

#### Notes:

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



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



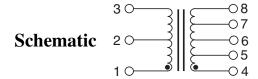


Operating Temp.	Prefix
0° to 70°C	С
-40° to +85°C	N
-55° to +125°C	TQ

<b>Summary Performance Specifications</b>			
Impedance (see table be			
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		

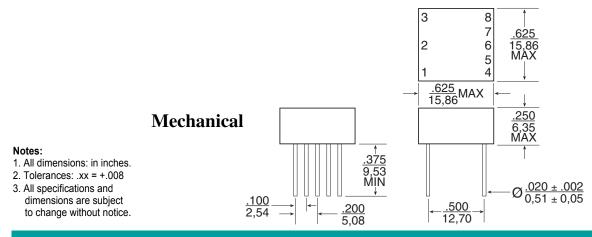
These non-QPL interface transformers are built and tested in ISO 9001 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27. Choose one of three operating temperature ranges including  $0^{\circ}$  to  $+70^{\circ}$ C,  $-40^{\circ}$  to  $+85^{\circ}$ C, or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

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



		Characteristics		
Part Number	Termimals	Ratio (±3%)	<b>RDC</b> ( $\Omega$ MAX)	Impedance ( $\Omega$ MIN)
(X)1553-1 <sup>1</sup>	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 <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
(X)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

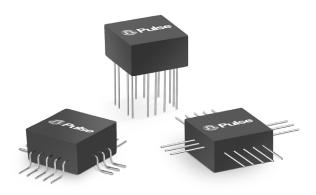
**NOTE: 1.** Refer to prefix table (above) to select temperature range. **2.** Designed for transceivers utilizing a single supply voltage (+5V).



USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 32181071 • China 86 755 33966678 • Taiwan 886 3 4643715

# Low Profile / Stacked Dual THT and SMT non-QPL Interface Transformers





- Built and tested to MIL-PRF-21038
- Withstands 220°C IR/Reflow temperature
- Operating & storage temperature:
  - -55°C to +130°C
- Through-hole, Flat-pack and SMT mount configurations

Electrical Specifications										
Part Number	Terminal Configuration	Ratio (±3%)	$\begin{array}{c} \textbf{RDC} \\ (\Omega \ \text{MAX}) \end{array}$	Impedance (Ω MIN)	Droop	Overshoot (MAX)	Common Mode Rejection (CMR)	Frequency Range (no load)	Insulation Resistance (mΩ MIN)	Dielectric Withstanding Voltage
THROUGH-HOL	E									
SLQT1553-1	1-3:4-8 (11-13:14-18) 1-3:5-7 (11-13:15-17)	1CT:1CT 1.4CT:1CT	1-3 (11-13) 3.5 4-8 (14-18) 3.5	(1-3 & 11-13) 4,000	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQT1553-2	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) 3.5 4-8 (14-18) 3.2	(1-3 & 11-13) 7,200	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQT1553-3	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	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQT1553-5	1-3:4-8 (11-13:14-18) 1-3:5-7 (11-13:15-17)	1CT:2.12CT	1-3 (11-13) 1.0 4-8 (14-18) 3.5	(4-8 & 14-18) 4,000	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQT1553-45	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	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
FLAT PACK	1 0.0 7 (11 10.10 17)		(	1,000						
SLQF1553-1	1-3:4-8 (11-13:14-18) 1-3:5-7 (11-13:15-17)	1CT:1CT 1.4CT:1CT	1-3 (11-13) 3.5 4-8 (14-18) 3.5	(1-3 & 11-13) 4,000	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQF1553-2	1-3:4-8 (11-13:14-18)	1.4CT:1CT	1-3 (11-13) 3.5	(1-3 & 11-13)	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQF1553-3	1-3:5-7 (11-13:15-17) 1-3:4-8 (11-13:14-18)	2CT:1CT 1.25CT:1CT	4-8 (14-18) 3.2 1-3 (11-13) 3.2	7,200 (1-3 & 11-13)	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQF1553-5	1-3:5-7 (11-13:15-17) 1-3:4-8 (11-13:14-18)	1.66CT:1CT 1CT:2.12CT	4-8 (14-18) 3.0 1-3 (11-13) 1.0	4,000 (4-8 & 14-18)	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQF1553-45	1-3:5-7 (11-13:15-17) 1-3:4-8 (11-13:14-18)		4-8 (14-18) 3.5 1-3 (11-13) 1.0	4,000 (4-8 & 14-18)	≤20%	±1V	≥45dB	75kHz to	10K	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.79CT	4-8 (14-18) 3.5	4,000				1MHz	@ 250Vdc	
GULL WING SLQG1553-1	1-3:4-8 (11-13:14-18) 1-3:5-7 (11-13:15-17)	1CT:1CT 1.4CT:1CT	1-3 (11-13) 3.5 4-8 (14-18) 3.5	(1-3 & 11-13) 4,000	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQG1553-2	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) 3.5 4-8 (14-18) 3.2	(1-3 & 11-13) 7,200	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQG1553-3	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	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQG1553-5		1CT:2.12CT	1-3 (11-13) 1.0 4-8 (14-18) 3.5	(4-8 & 14-18) 4.000	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
SLQG1553-45	1-3:4-8 (11-13:14-18)	1CT:2.5CT 1CT:1.79CT	1-3 (11-13) 1.0 4-8 (14-18) 3.5	(4-8 & 14-18) 4,000	≤20%	±1V	≥45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms

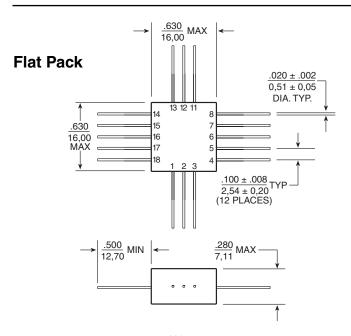
NOTE: IPC/JDEC J-STD-020A Moisture Sensitivity – Through Hole: Level 1 – Surface Mount: Level 3

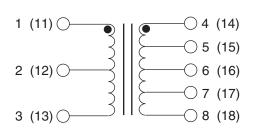
# Low Profile / Stacked Dual THT and SMT non-QPL Interface Transformers



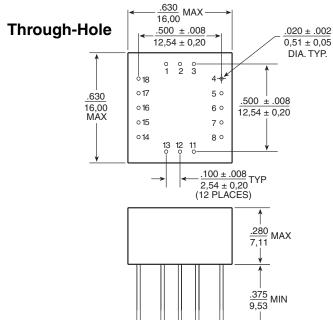
#### Mechanical

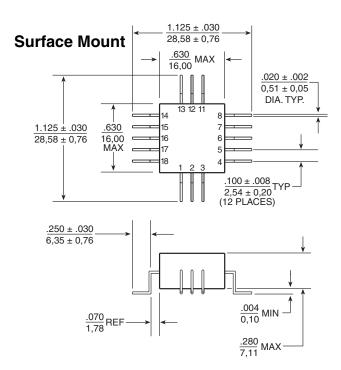
#### **Schematic**





Dimensions:  $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ 







#### WARRANTY

Pulse Military Aerospace Division warrants for a period of 90 days from the date of shipment, that under normal use and service, its products will be free from defects in workmanship and material. Pulse Military Aerospace Division's sole responsibility under this warranty is, at its option, to repair or replace, without charge, any defective product or part, or to credit buyer for the purchase price of such defective product, provided:

- 1) Buyer promptly notifies Pulse Military Aerospace Division in writing within the warranty period, and
- 2) The defective product or part is returned to Pulse Military Aerospace Division with transportation charges prepaid by Buyer, and
- 3) Pulse Military Aerospace Division's examination of such product shall disclose to its satisfaction that said defect exists and has not been caused by misuse, neglect, improper installation, repair or alteration, or accident.

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