

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







### 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

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		

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.

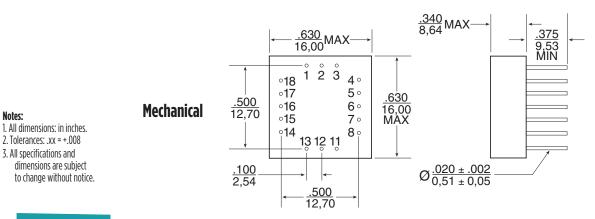
**Schematic** 

- 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

3(13) 🔾	08(18)
2(12) $\bigcirc$	
1(11) 0	05 (15) 04 (14)

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



pulseelectronics.com M230.B (11/14)

## MIL-STD-1553 Transformers

Stacked Dual THT non-QPL Interface Transformers



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

Table 1 — Group A Inspection					
Level	"("**	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		

<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.

#### For More Information

Pulse North America Headquarters	Pulse Europe Zeppelinstrasse 15	Pulse China Headquarters B402, Shenzhen Academy of	Pulse North China Room 2704/2705	<b>Pulse South Asia</b> 135 Joo Seng Road	<b>Pulse North Asia</b> 3F No. 198, Zhongyuan Road	
Two Pearl Buck Court	71083 Herrenberg	Aerospace Technology Bldg.	Super Ocean Finance Ctr.	#03-02	Zhonali City	
Bristol, PA 19007	Germany	10th Kejinan Road	2067 Yan An Road West	PM Industrial Bldg.	Taoyuan County (32068)	
U.S.A.		High-Tech Zone	Shanghai 200336	Singapore 368363	Taiwan	
		Nanshan District	China			
		Shenzen, PR China 518057				
Tel: 215 781 6400 Fax: 215 781 6403	Tel: 49 7032 7806 0 Fax: 49 7032 7806 12	Tel: 86 755 33966678 Fax: 86 755 33966700	Tel: 86 21 62787060 Fax: 86 2162786973	Tel: 65 6287 8998 Fax: 65 6287 8998	Tel: 886 3 4356768 Fax: 886 3 4356823	

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, 2013. Pulse Electronics, Inc. All rights reserved.

2 pulseelectronics.com M230.B (11/14)