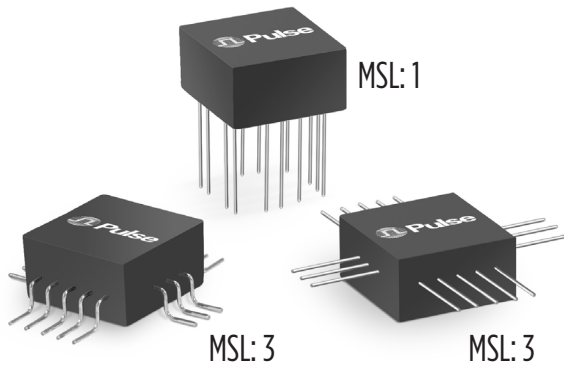


# MIL-STD-1553 Transformers

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



- Built and tested to MIL-PRF-21038
- Withstands 220°C IR/Reflow Temperature
- Operating and Storage Temperature: -55°C to +130°C
- Through-Hole, Flat-pack and SMT mount configurations
- Through-Hole, Moisture Sensitivity Level: 1
- Surface Mount, Moisture Sensitivity Level: 3

## Electrical Specifications Operating Temperature: -55°C to +130°C

Part Number	Terminal Configuration	Ratio (+/-3%)	RDC (ΩMAX)	Impedance (Ω MIN)	Drop	Overshoot (MAX)	Common Mode Rejection (CMR)	Frequency Range (no load)	Insulation Resistance (mΩMIN)	Dielectric Withstanding Voltage
<b>THROUGH-HOLE</b>										
SLQTI553-1	1-3:4-8 (11-13:14-18)	1CT:1CT	1-3 (11-13) 3.5	(1-3 & 11-13)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1.4CT:1CT	4-8 (14-18) 3.5	4,000						
SLQTI553-2	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
	1-3:5-7 (11-13:15-17)	2CT:1CT	4-8 (14-18) 3.2	7,200						
SLQTI553-3	1-3:4-8 (11-13:14-18)	1.25CT:1CT	1-3 (11-13) 3.2	(1-3 & 11-13)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1.66CT:1CT	4-8 (14-18) 3.0	4,000						
SLQTI553-5	1-3:4-8 (11-13:14-18)	1CT:2.12CT	1-3 (11-13) 1.0	(4-8 & 14-18)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.5CT	4-8 (14-18) 3.5	4,000						
SLQTI553-45	1-3:4-8 (11-13:14-18)	1CT:2.5CT	1-3 (11-13) 1.0	(4-8 & 14-18)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.79CT	4-8 (14-18) 3.5	4,000						
<b>FLAT PACK</b>										
SLQFI553-1	1-3:4-8 (11-13:14-18)	1CT:1CT	1-3 (11-13) 3.5	(1-3 & 11-13)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1.4CT:1CT	4-8 (14-18) 3.5	4,000						
SLQFI553-2	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
	1-3:5-7 (11-13:15-17)	2CT:1CT	4-8 (14-18) 3.2	7,200						
SLQFI553-3	1-3:4-8 (11-13:14-18)	1.25CT:1CT	1-3 (11-13) 3.2	(1-3 & 11-13)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1.66CT:1CT	4-8 (14-18) 3.0	4,000						
SLQFI553-5	1-3:4-8 (11-13:14-18)	1CT:2.12CT	1-3 (11-13) 1.0	(4-8 & 14-18)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.5CT	4-8 (14-18) 3.5	4,000						
SLQFI553-45	1-3:4-8 (11-13:14-18)	1CT:2.5CT	1-3 (11-13) 1.0	(4-8 & 14-18)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.79CT	4-8 (14-18) 3.5	4,000						
<b>GULL WING</b>										
SLQGI553-1	1-3:4-8 (11-13:14-18)	1CT:1CT	1-3 (11-13) 3.5	(1-3 & 11-13)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1.4CT:1CT	4-8 (14-18) 3.5	4,000						
SLQGI553-2	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
	1-3:5-7 (11-13:15-17)	2CT:1CT	4-8 (14-18) 3.2	7,200						
SLQGI553-3	1-3:4-8 (11-13:14-18)	1.25CT:1CT	1-3 (11-13) 3.2	(1-3 & 11-13)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1.66CT:1CT	4-8 (14-18) 3.0	4,000						
SLQGI553-5	1-3:4-8 (11-13:14-18)	1CT:2.12CT	1-3 (11-13) 1.0	(4-8 & 14-18)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.5CT	4-8 (14-18) 3.5	4,000						
SLQGI553-45	1-3:4-8 (11-13:14-18)	1CT:2.5CT	1-3 (11-13) 1.0	(4-8 & 14-18)	20%	± 1V	45dB	75kHz to 1MHz	10K @ 250Vdc	100Vrms
	1-3:5-7 (11-13:15-17)	1CT:1.79CT	4-8 (14-18) 3.5	4,000						

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

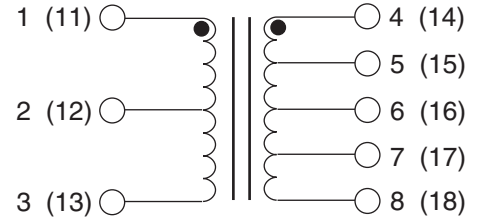
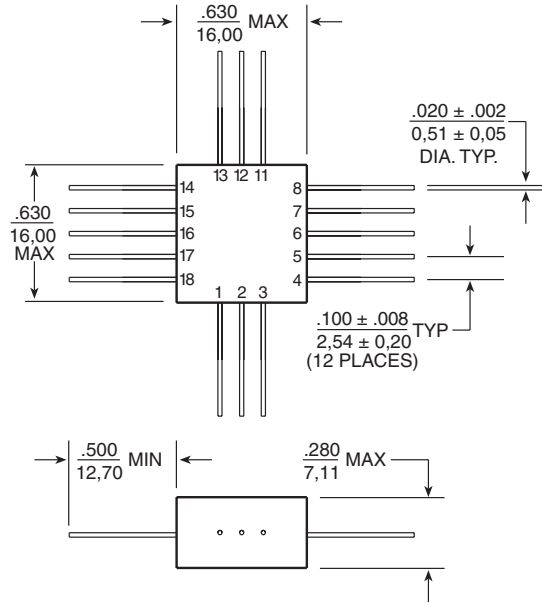
# MIL-STD-1553 Transformers

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

## Mechanical

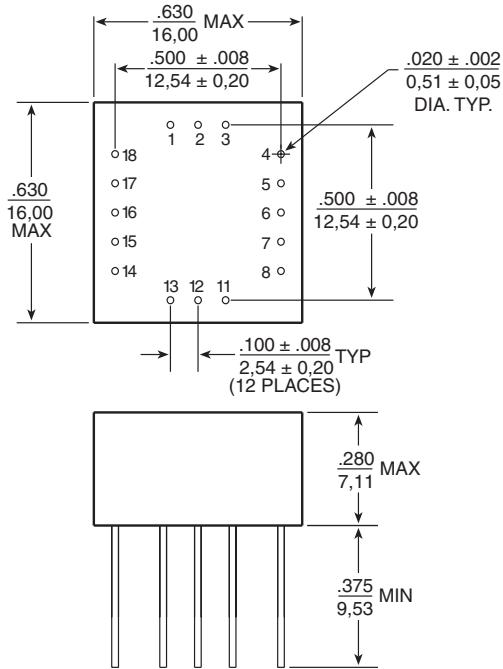
## Schematic

### Flat Pack

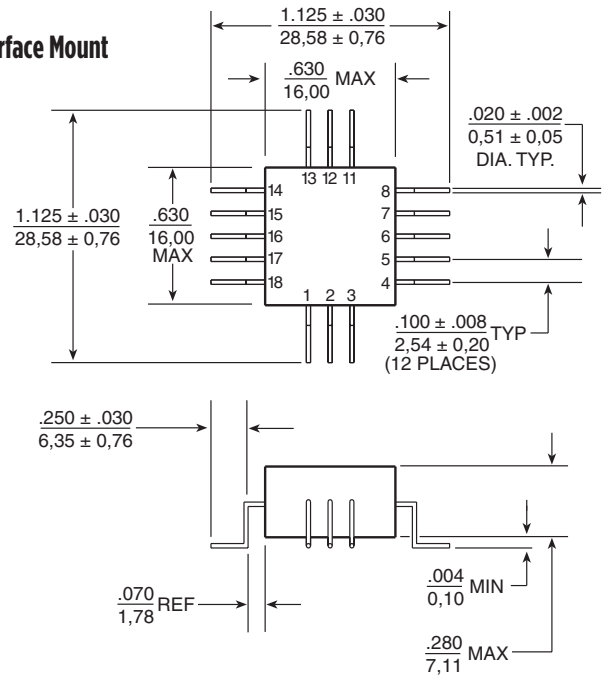


Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified,  
 all tolerances are  $\frac{3.010}{0.25}$

### Through-Hole



### Surface Mount



## 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.

### For More Information

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