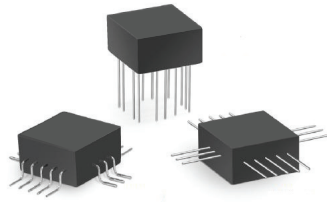


MIL-STD-1553 TRANSFORMERS

Low Profile, Stacked Dual THT & SMT Non-QPL Interface Transformers

Ruggedized



Summary Performance Specifications

Droop	20% MAX
Overshoot	±1V MAX
Common Mode Rejection (CMR)	45dB MIN
Frequency Range (no load)	75kHz - 1MHz
Insulation Resistance (MIN)	10K MΩ @ 250Vdc
Dielectric Withstanding Voltage	100Vrms
Prefix	SLQT (Through-Hole), SLQF (Flat-Pack), SLQG (Gull-Wing)

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

- Through-Hole, Flat-pack and Surface Mount Configurations
- Conform to all electrical and physical parameters of MIL-PRF-21038/27
- Operating & Storage Temperature: -55°C to +130°C
- Lead Finish: Sn63Pb37
- Moisture Sensitivity Level:
 - Through-Hole: 1
 - Surface Mount: 3
- Applicable Specifications:
 - MIL-STD-1553B
 - MIL-STD-202
 - MIL-PRF-21038
 - ISO 9001

Electrical Specifications

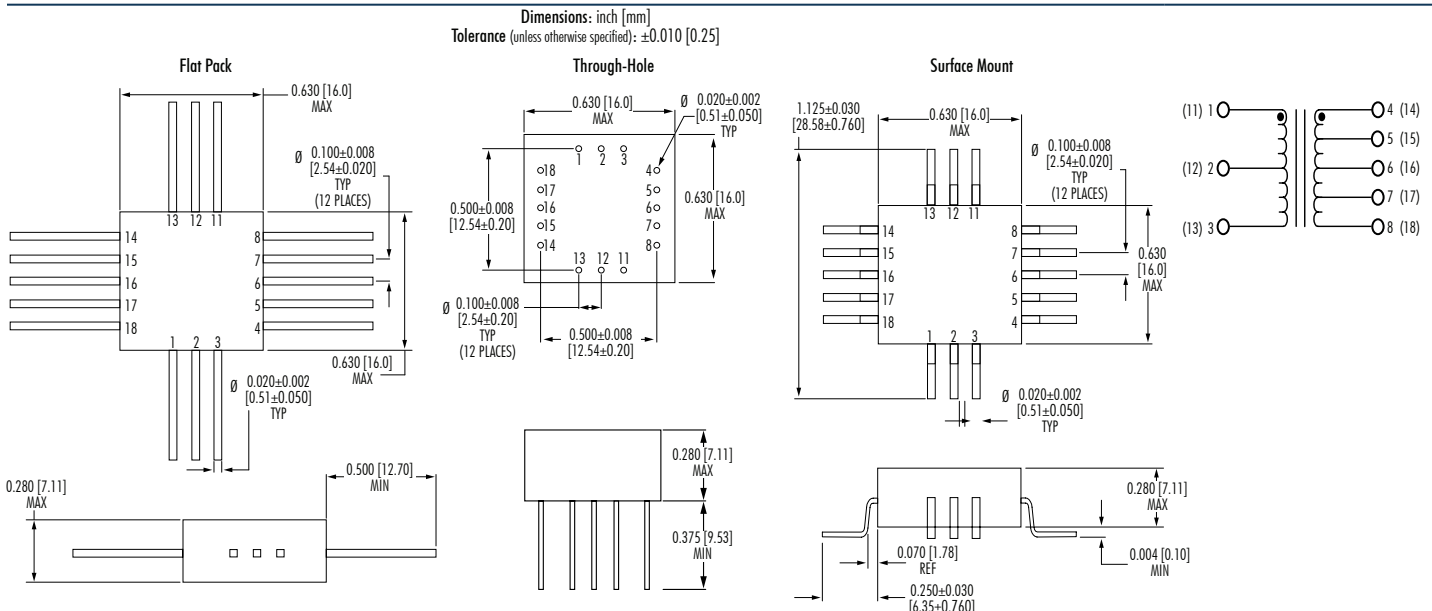
Part Number	Terminal Configuration	Turns Ratio	RDC MAX	Impedance MIN
		(±3%)	(Ω)	(Ω)
(XXXX)1553-1	1-3:4-8 / 11-13:14-18 1-3:5-7 / 11-13:15-17	1CT:1CT 1.40CT:1CT	1-3, 11-13 = 3.5 4-8, 14-18 = 3.5	(1-3, 11-13) 4,000
(XXXX)1553-2	1-3:4-8 / 11-13:14-18 1-3:5-7 / 11-13:15-17	1.40CT:1CT 2CT:1CT	1-3, 11-13 = 3.5 4-8, 14-18 = 3.2	(1-3, 11-13) 7,200
(XXXX)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
(XXXX)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
(XXXX)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:

- Replace (XXXX) from the part number in the table with the desired prefix: SLQT, SLQF, SLQG.

Mechanicals

Electrical Schematics



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

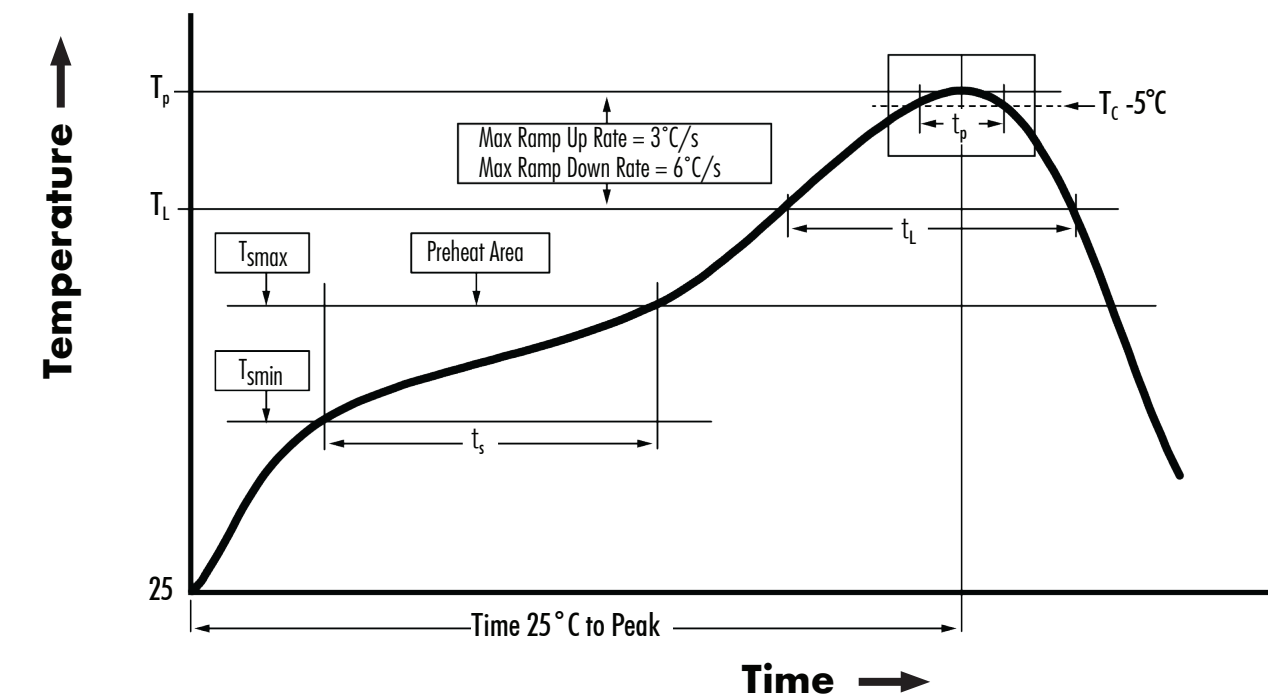
Table 2 - Group B Inspection					
Level "C" **		Level "M"		Level "T"	
Tests	Sampling Plan	Tests	Sampling Plan	Tests	Sampling Plan
N/A	N/A	Dielectric Withstanding Voltage	Sample per Table 3	Dielectric Withstanding Voltage	Sample per Table 3
N/A	N/A	Insulation Resistance	Sample per Table 3	Insulation Resistance	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.



Recommended Reflow Profile (Based on J-STD-020D)



T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_S (s)	t_L (s)	t_P (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
Tin/Lead Profile									
100	150	183	225	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360

- NOTES:
- 1. All temperatures measured on the package leads.
 - 2. Maximum number of reflow cycles not to exceed 2.