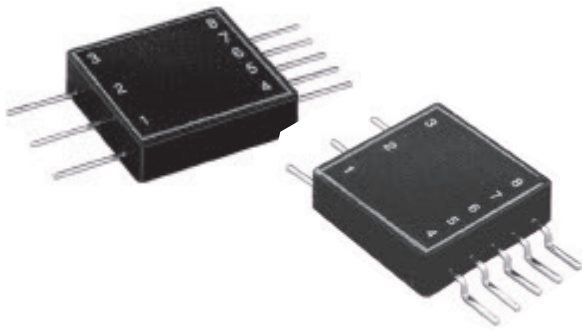


MIL-STD-1553 Transformers

Low Profile SMT Non-QPL Interface Transformers



- ⊗ 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

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

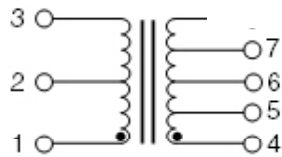
Choose 1 of 3 Operating Temp. Ranges :

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 ¹	Terminals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)
(XXX)1553-1	1-3 : 4-8 1-3 : 5-7	1CT:1CT 1CT:.707CT	1-3 = 3.0 4-8 = 3.0	(1-3) 4,000
(XXX)1553-2	1-3 : 4-8 1-3 : 5-7	1.4CT:1CT 2CT:1CT	1-3 = 3.5 4-8 = 3.0	(1-3) 7,200
(XXX)1553-3	1-3 : 4-8 1-3 : 5-7	1.25CT:1CT 1.66CT:1CT	1-3 = 3.2 4-8 = 3.0	(1-3) 4,000
(XXX)1553-5 ²	1-3 : 4-8 1-3 : 5-7	1CT:2.12CT 1CT:1.5CT	1-3 = 1.0 4-8 = 3.5	(4-8) 4,000
(XXX)1553-45 ²	1-3 : 4-8 1-3 : 5-7	1CT:2.5CT 1CT:1.79CT	1-3 = 1.0 4-8 = 3.5	(4-8) 4,000

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

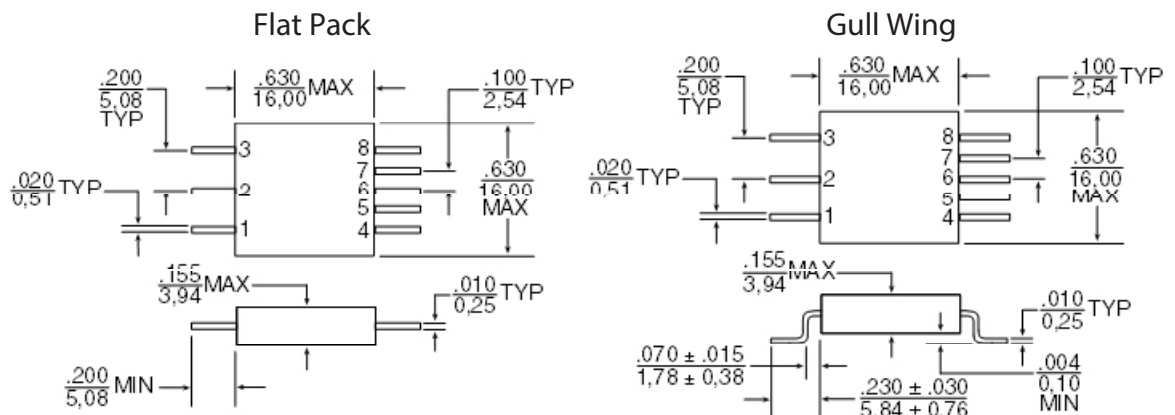
Schematic



Notes:

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

Mechanical



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

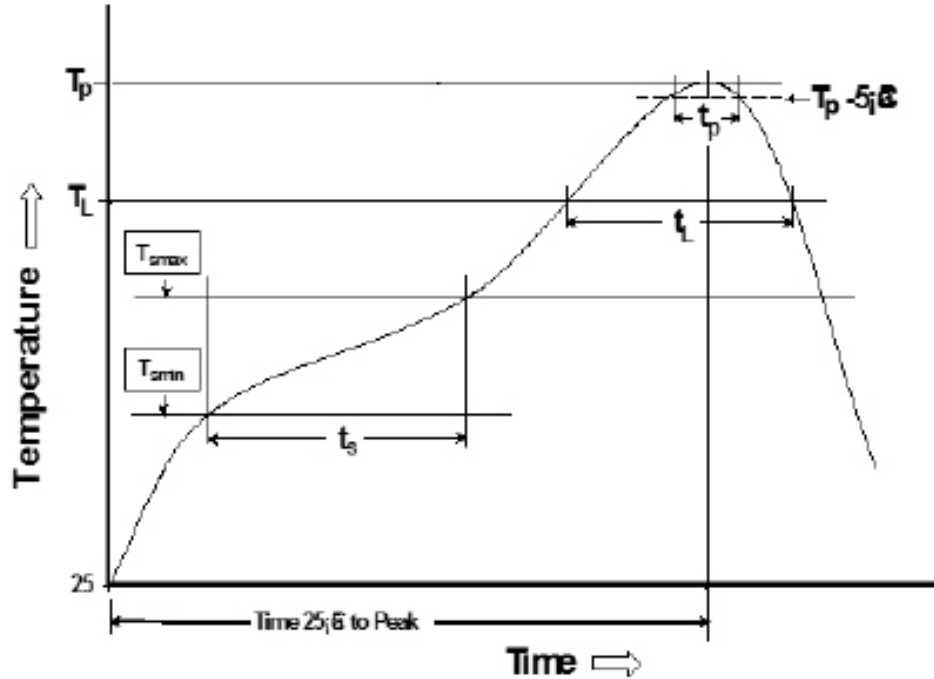
Table 2 — Group B Inspection					
Level "C"***		Level "M"		Level "T"	
Tests	Sampling Plan	Tests	Sampling Plan	Tests	Sampling Plan
N/A	N/A	Dielectric Withstanding Voltage	Sample per Table 3	Dielectric Withstanding Voltage	Sample per Table 3
N/A	N/A	Insulation Resistance	Sample per Table 3	Insulation Resistance	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: 1. Refer to prefix table (above) to select temperature range. 2. Designed for transceivers utilizing a single supply voltage (+5V).



Tin/Lead 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)
100	150	183	235	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 times of reflow cycle: 2.

For More Information

iNRCORE, LLC
 311 Sinclair Road Bristol,
 PA 19007-6812 U.S.A
 Tel: + 1.215.781.6400
 Fax: +1.215.7816430

Global Sales Representatives and Locations:
<http://www.inrcore.com>

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, 2020. iNRCORE, LLC. All rights reserved.

