MIL-STD-1553 TRANSFORMERS

Low Profile Dual 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							
Operating Temperature Range (based on Prefix)	Flat Pack Gull-Wing DFLC DGLC 0°C to +70°C DFLN DGLN -40°C to +85°C DFL DGL -55°C to +125°C							
Weight	5 grams MAX							
Insulation Resistance (MIN)	10K MΩ @ 250Vdc							
Dielectric Withstanding Voltage	100Vrms							



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

- Dual ratio, dual interface
- Surface Mount, flat pack or gull-wing package
- Conform to all electrical and physical parameters of MIL-PRF-21038/27
- Moisture Sensitivity Level: 3
- Low profile, 0.155 inches height
- Applicable Specifications:

 MIL-STD-1553B

 - MIL-STD-202
 - MIL-PRF-21038 0
- ISO 9001 0

Characteristics								
Part Number	Terminals	Ratio (±3%)	RDC MAX (Ω)	Impedance MIN (Ω)				
(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:0.707CT	16-13, 12-9 = 3.0	4,000				
(XXXX)1553-2	1-3:16-13 / 5-7:12-9	1.40CT: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*	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:1.50CT	16-13, 12-9 = 3.5	4,000				
(XXXX)1553-45*	1-3:16-13 / 5-7:12-9	1 CT: 2.50CT	1-3, 5-7 = 1.0	(16-13, 12-9)				
	1-3:15-14 / 5-7:11-10	1 CT: 1.79CT	16-13, 12-9 = 3.5	4,000				

NOTES:

- 1. Refer to the Summary Performance Specifications Table above to select the prefix for your desired Operating Temperature Range. Replace (XXXX) from the part number in the table with the desired prefix: DFLC, DFLN, DFL, DGLC, DGLN, DGL.
- Designed for transceivers utilizing a single supply voltage (+5V).

Electrical Schematics Mechanicals Dimensions: inch [mm] Tolerance (unless otherwise specified): ±0.010 [0.25] Flat Pack 0.630 [16.0] MAX 0.020 [0.51] TYP 0.200 [5.08] MIN **O**14 0.155 [3.94] MAX 3**O O**13 **O**12 0.930 [23.62] MAX Gull-Wing O_{11} 0.010 [0.25] TYP O8 **O**10 0.070±0.015 [1.78±0.380] __0.004 [0.10] MIN 0.155 [3.94] MAX 0.230±0.030 [5.84±0.760] 14X 0.100 [2.54]

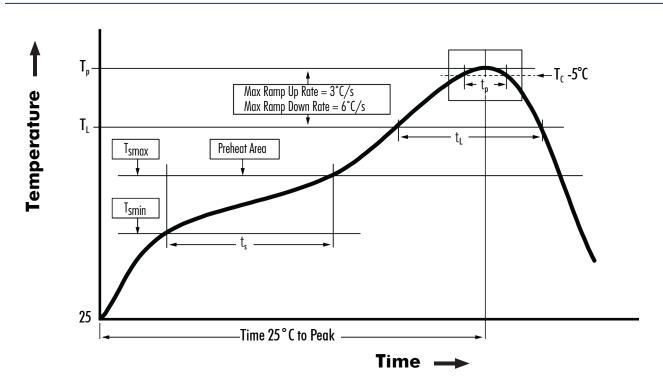


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Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



T _{smin} (°C)	T _{smax} (°C)	T _ւ (°C)	T _P (°C MAX)	† _s (s)	† _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	225	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360

NOTES:

- 1. All temperatures measured on the package leads.
- $2. \ \text{Maximum times of reflow cycle: } 2 \\$



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