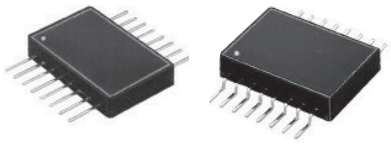
MIL-STD-1553 TRANSFORMERS

Low Profile Dual SMT Non-QPL Interface Transformers
Ruggedized



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
  - ISO 9001

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		

Characteristics

Part Number	Terminals	Ratio (±3%)	RDC MAX (Ω)	Impedance MIN (Ω)
(XXXX)1553-1	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1CT:1CT 1CT:0.707CT	1-3, 5-7 = 3.0 16-13, 12-9 = 3.0	(1-3, 5-7) 4,000
(XXXX)1553-2	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1.40CT:1CT 2CT:1CT	1-3, 5-7 = 3.5 16-13, 12-9 = 3.0	(1-3, 5-7) 7,200
(XXXX)1553-3	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1.25CT:1CT 1.66CT:1CT	1-3, 5-7 = 3.2 16-13, 12-9 = 3.0	(1-3, 5-7) 4,000
(XXXX)1553-5*	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1CT:2.12CT 1CT:1.50CT	1-3, 5-7 = 1.0 16-13, 12-9 = 3.5	(16-13, 12-9) 4,000
(XXXX)1553-45*	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1CT:2.50CT 1CT:1.79CT	1-3, 5-7 = 1.0 16-13, 12-9 = 3.5	(16-13, 12-9) 4,000

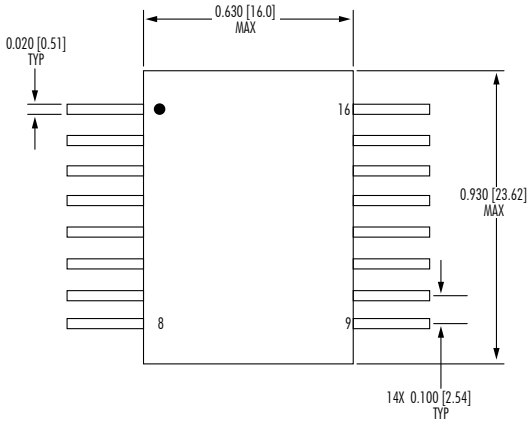
NOTES:

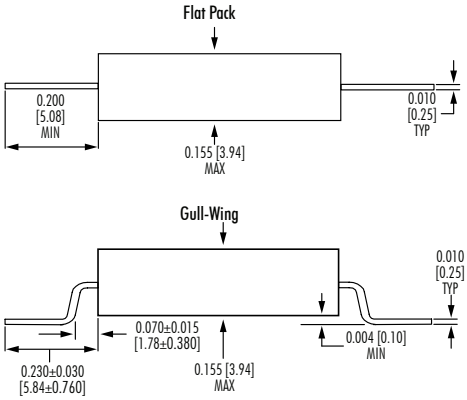
1. Refer to the Summary Performance Specifications Table above to select the prefix for your desired Operating Temperature Range. Replace **(XXXX)** from the part number in the table with the desired prefix: **DFLC**, **DFLN**, **DFL**, **DGLC**, **DGLN**, **DGL**.

* Designed for transceivers utilizing a single supply voltage (+5V).

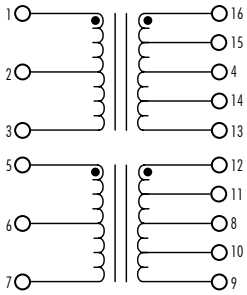
Mechanicals

Dimensions: inch [mm]
Tolerance (unless otherwise specified): ±0.010 [0.25]



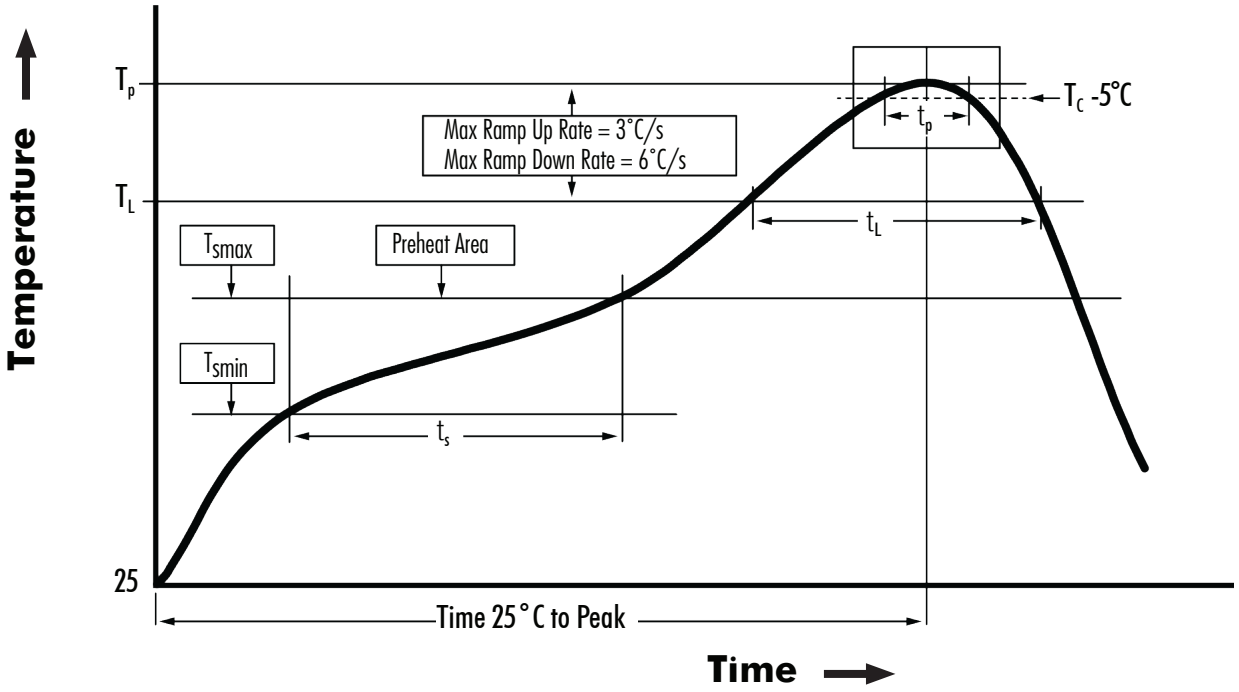


Electrical Schematics



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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	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 times of reflow cycle: 2

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