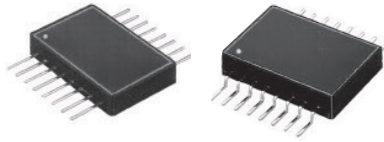


# MIL-STD-1553 TRANSFORMERS

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			
Drop	20% MAX		
Overshoot	±1V MAX		
Common Mode Rejection (CMR)	45dB MIN		
Frequency Range (no load)	75kHz - 1MHz		
Operating Temperature Range <i>(based on Prefix)</i>	<b>Flat Pack</b>	<b>Gull-Wing</b>	
	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

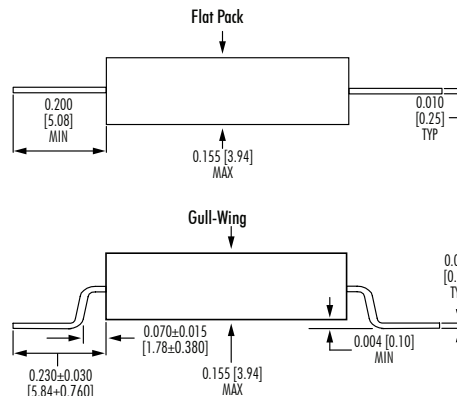
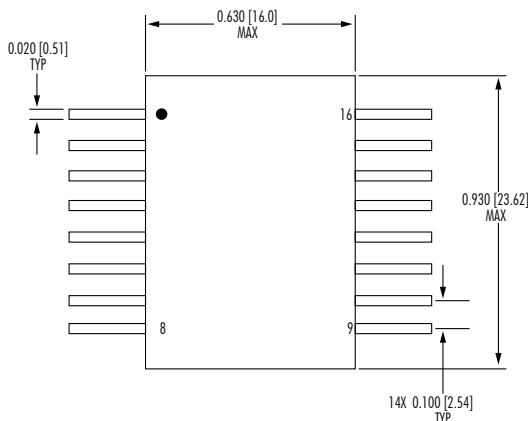
Part Number	Terminals	Ratio	RDC MAX	Impedance MIN
		(±3%)	(Ω)	(Ω)
(XXX)1553-1	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1CT:1CT 1CT:0.707CT	1-3, 5-7 = 3.0 16-13, 12-9 = 3.0	(1-3, 5-7) 4,000
(XXX)1553-2	1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10	1.40CT:1CT 2CT:1CT	1-3, 5-7 = 3.5 16-13, 12-9 = 3.0	(1-3, 5-7) 7,200
(XXX)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
(XXX)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
(XXX)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:

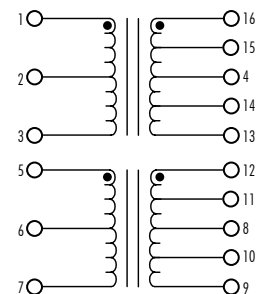
1. Refer to the Summary Performance Specifications Table above to select the prefix for your desired Operating Temperature Range. Replace (XXX) from the part number in the table with the desired prefix: DFLC, DFLN, DFL, DGLC, DGLN, DGL.
- \* Designed for transceivers utilizing a single supply voltage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

### Mechanicals

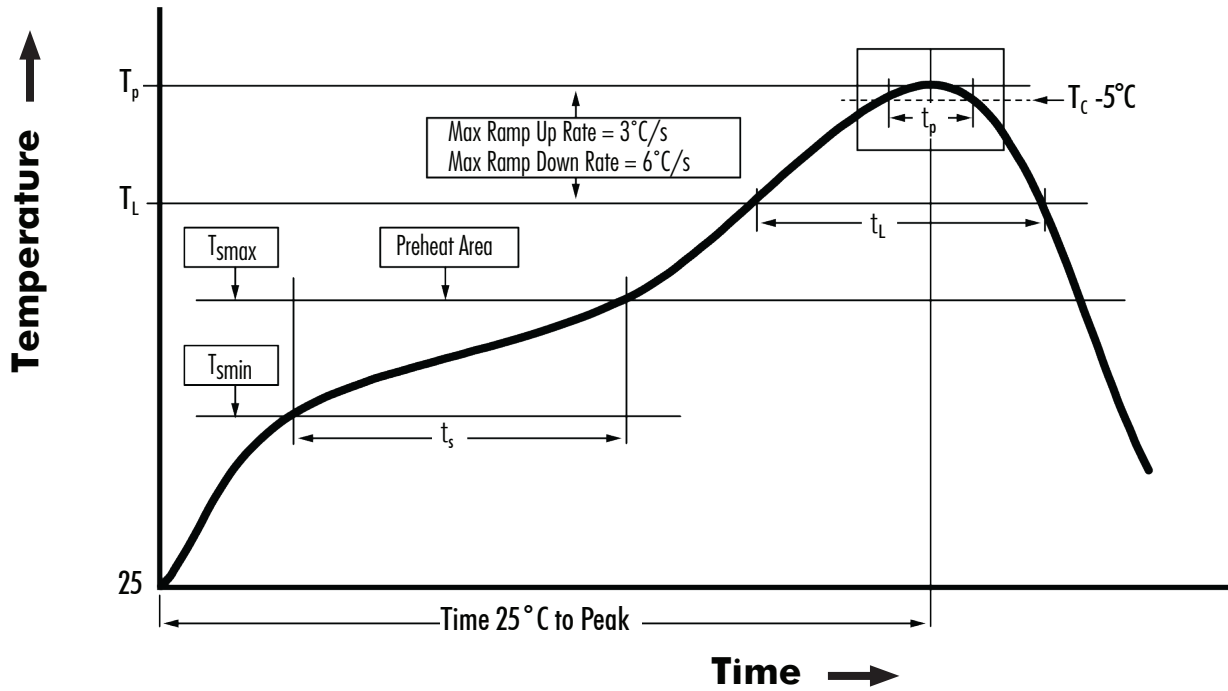
Dimensions: inch [mm]  
Tolerance (unless otherwise specified): ±0.010 [0.25]



### Electrical Schematics



## 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

