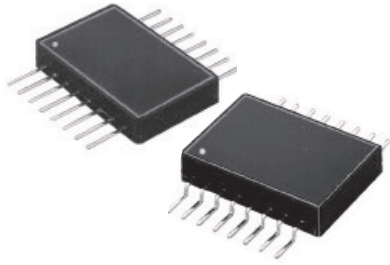


# MIL-STD-1553 Transformers

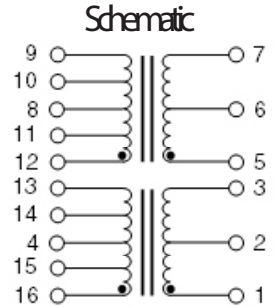
Low Profile SMT Dual non-QPL Interface Transformers



These non-QPL interface transformers are built and tested in ISO 9001 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27. Choose one of three operating temperature ranges including 0° to +70°C, -40° to +85°C, or -55° to +125°C.

Operating Temperature	Flat Pack Prefix	Gull Wing Prefix
0° to 70°C	DFLC	DGLC
-40° to +85°C	DFLN	DGLN
-55° to +125°C	DFL	DGL

- Dual ratio, dual 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
- Built in ISO 9001 facility
- Applicable specifications:
  - n MIL-STD-1553B
  - n MIL-STD-202



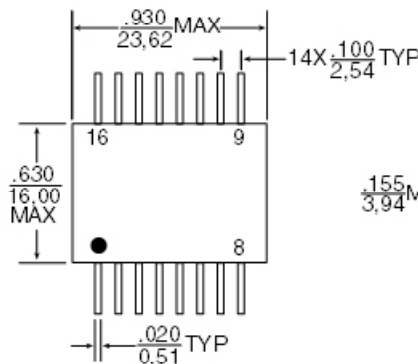
Summary Performance Specifications	
Impedance	(see table below)
Droop	□ 20%
Overshoot	±1V MAX
Common Mode Rejection (CMR)	□ 45dB
Frequency Range (no load)	75kHz to 1MHz
Operating Temperature Range	(see table above)
Weight	□ 5 grams
Insulation Resistance (MIN)	10K MΩ @ 250Vdc
Dielectric Withstanding Voltage	100Vrms

Characteristics				
Part Number <sup>1</sup>	Terminals	Ratio (±3%)	RDC (Ω MAX)	Impedance (Ω MIN)
(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:.707CT	16-13, 12-9 = 3.0	4,000
(XXXX)1553-2	1-3 : 16-13 / 5-7 : 12-9	1.4CT: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 <sup>2</sup>	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:1.5CT	16-13, 12-9 = 3.5	4,000
(XXXX)1553-45 <sup>2</sup>	1-3 : 16-13 / 5-7 : 12-9	1CT:2.5CT	1-3, 5-7 = 1.0	(16-13, 12-9)
	1-3 : 15-14 / 5-7 : 11-10	1CT:1.79CT	16-13, 12-9 = 3.5	4,000

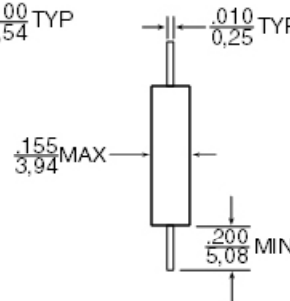
NOTE: 1. Refer to prefix table (above) to select temperature range. 2. Designed for transceivers utilizing a single supply voltage (+5V).

## Mechanicals

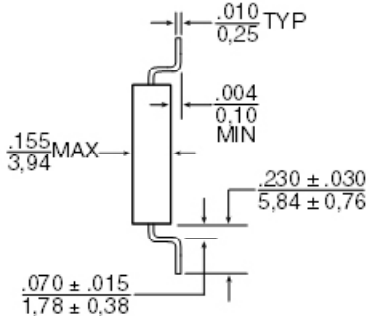
- Notes:
- All dimensions are in inches.
  - Tolerances: .xx = +.008
  - All specifications and dimensions are subject to change without notice.



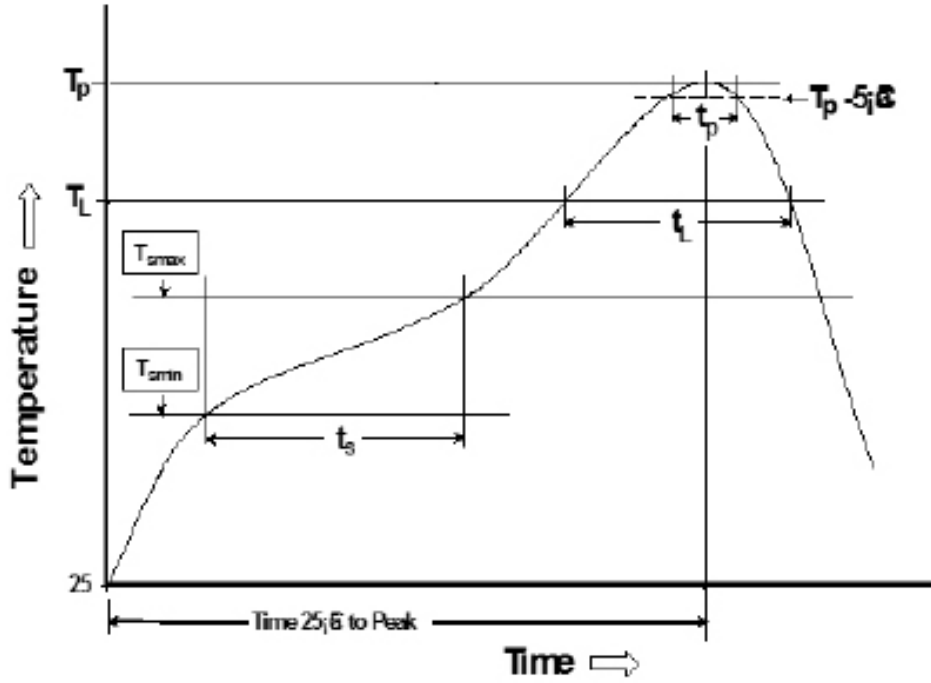
Flat Pack



GullWing



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

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