# 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  $0^{\circ}$  to  $+70^{\circ}$ C,  $-40^{\circ}$  to  $+85^{\circ}$ C, or  $-55^{\circ}$  to  $+125^{\circ}$ 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	

DFLN	DGLN		
DFL	DGL		
Summary Performance Specifications			
(se	e table below)		
	□ 20%		
	±1V MAX		
n (CMR)	☐ 45dB		
	DFL rformance Spe (se	DFL DGL  rformance Specifications  (see table below)  □ 20%  ±1V MAX	

- 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
- R 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

Characteristics					
Part Number 1	Termimals	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) 4,000	
(۸۸۸۸)1555-1	1-3:15-14 / 5-7:11-10	1CT:.707CT	16-13, 12-9 = 3.0		
(XXXX)1553-2	1-3:16-13 / 5-7:12-9	1.4CT:1CT	1-3, 5-7 = 3.5	(1-3, 5-7)	
(XXXX)1333-2	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)	
(XXXX)1333-3	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)	
(\lambda\lambda\lambda) 1333-3	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)	
(۸۸۸۸) 1333-43	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).

75kHz to 1MHz

☐ 5 grams

100Vrms

(see table above)

10K MΩ @ 250Vdc

### Notes:

1. All dimensions are in inches.

Frequency Range (no load)

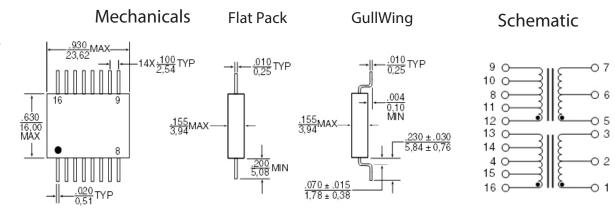
Insualtion Resistance (MIN)

Weight

Operating Temperature Range

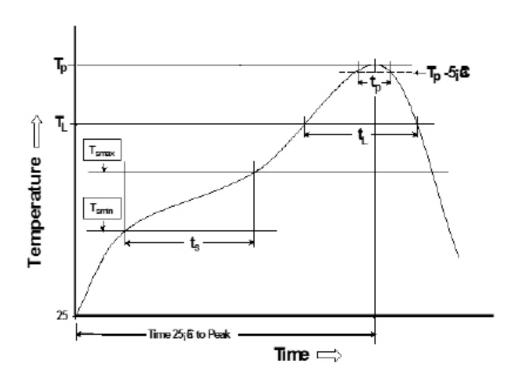
Dielectric Withstanding Voltage

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





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



T <sub>SMIN</sub> (°C)	T <sub>SMAX</sub> (°C)	T <sub>L</sub> (°C)	T <sub>P</sub> (°C MAX)	t <sub>S</sub> (s)	t <sub>L</sub> (s)	t <sub>P</sub> (s MAX)	Ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	Ramp-down rate (T <sub>P</sub> to T <sub>L</sub> )	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 PulseR North America Headquarters 311 Sinclair Road, Bristol, PA 19007-1524 U.S.A.

Tel: +1.215. 781. 6400 Fax: +1.215. 781. 6403 For Global Sales Representative and Locations Visit: http://www.pulseruggedized.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, 2019. PulseR,LLC. All rights reserved.