

non-QPL MIL-STD-1553 INTERFACE TRANSFORMERS

Pulse Specialty Components
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For **OPL** pulse transformers....

In addition to the non-QPL transformers described in this catalog, Pulse Specialty Components offers many transformer models qualified for QPL/military applications. These include:

- surface-mount or through-the-board
- single- or dual-ratio

For more information, ask for our catalog entitled "QPL MIL-STD-1553 INTERFACE TRANSFORMERS"

As part of Pulse, Specialty Components has access to offshore manufacturing, state-of-the-art packaging technology and worldwide purchasing power to provide extremely cost-effective products for customers. Many low-power pulse transformer products have been developed in response to the Perry Initiative and its COTs mandate.

The products shown on the next page and described in this catalog have performance and electrical characteristics compliant with MIL-PRF-21038/27 but have been tailored in response to the demands of today's marketplace....

- COTs models for reduced-requirement military applications (non-QPL) and reduced cost
- Low profile for reduced board-stacking height
- Single- ratio and dual-ratio
- Single interface and dual interface
- Vertically stacked dual interface
- $\blacksquare 0-70^{\circ} \text{C or } -40 \text{ to } +85^{\circ} \text{C or } -55 \text{ to } +125^{\circ} \text{C}$
- Hermetically sealed for extreme environments

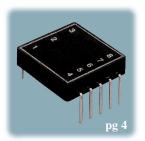
Browse the next page to find and select the product that meets your non-QPL requirements. Request our catalog on QPL MIL-PRF-21038 transformers for applications calling for QPL components.



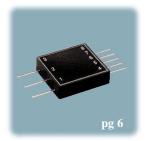




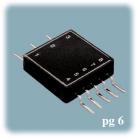
Contents



- low profile
- dual ratio
- through the board



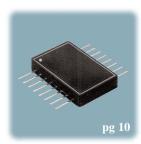
- low profile
- dual ratio
- surface-mount flat pack



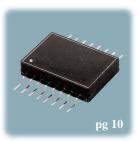
- low profile
- dual ratio
- surface-mount gull wing



- dual interface
- low profile
- dual ratio
- through the board



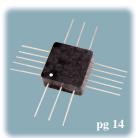
- dual interface
- low profile
- dual ratio
- surface-mount flat pack



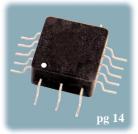
- dual interface
- low profile
- dual ratio
- surface-mount gull wing



- dual interface
- stacked
- dual ratio
- through the board



- dual interface
- stacked
- dual ratio
- surface-mount flat pack



- dual interface
- stacked
- dual ratio
- surface-mount gull wing

Hermetically Sealed



- single interface
- dual ratio
- surface-mount flat pack

Value Series -- COTS



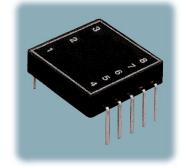
- standard profile
- dual ratio
- through the board

QPL COTS The package shown here as "Value Series COTS" is

also available fully qualified to MIL-PRF-21038/27 requirements.

Through the board low profile MIL-PRF-21038 Interface Transformers

These non-QPL interface transformers are built and tested in ISO 9002 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 $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.



- dual ratio, single interface (see schematic)
- through the board package
- for use in MIL-STD-1553 applications
- low profile, 0.155 in. height
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility

operating temp.	prefix
0° to 70°C	TLC
-40° to +85°C	TLN
-55° to +125°C	TL

APPLICABLE SPECIFICATIONS

- **■** MIL-STD-1553B
- **MIL-STD-202**
- MIL-T-10727
- MIL-PRF-21038
- ISO 9002

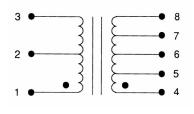
Impedance	see table, next page
Droop	≤ 20%
Overshoot	<u>+</u> 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

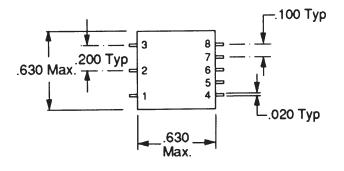
PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX.	IMPEDANCE (ohms) MIN.
(XXX)1553-1 1	1-3:4-8	1CT:1CT	1-3 = 3.0	(1-3)
	1-3:5-7	1CT:.707CT	4-8 = 3.0	4,000
(XXX)1553-2	1-3:4-8	1.4CT:1CT	1-3 = 3.5	(1-3)
	1-3:5-7	2CT:1CT	4-8 = 3.0	7,200
(XXX)1553-3	1-3:4-8	1.25CT:1CT	1-3 = 3.2	(1-3)
	1-3:5-7	1.66CT:1CT	4-8 = 3.0	4,000
(XXX)1553-5 2	1-3:4-8	1CT:2.12CT	1-3 = 1.0	(4-8)
	1-3:5-7	1CT:1.5CT	4-8 = 3.5	4,000
(XXX)1553-45 ²	1-3:4-8	1CT:2.5CT	1-3 = 1.0	(4-8)
	1-3:5-7	1CT:1.79CT	4-8 = 3.5	4,000

- low profile
- dual ratio
- through the board

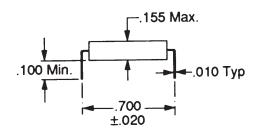
- 1 Refer to prefix table (right) to select temperature range.
- Designed for transceivers utilizing a single supply voltage (+5V).

operating temp.	prefix
0° to 70°C	TLC
-40° to +85°C	TLN
-55° to +125°C	TL





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

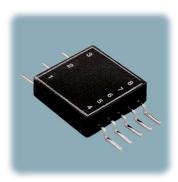


Surface mount low profile MIL-PRF-21038 Interface Transformers

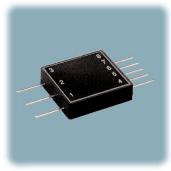
These non-QPL interface transformers are built and tested in ISO 9002 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27. Choose one of three operating temperature ranges including 0° to +70° C, -40° to +85° C, or -55° to +125° C.

- dual ratio, single interface (see schematic)
- surface mount; gull wing or flat pack
- for use in MIL-STD-1553 applications
- low profile, 0.155 in. height
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility

operating temp.	gull wing package	flat pack
0° to 70°C	GLC	FLC
-40° to +85°C	GLN	FLN
-55° to +125°C	GL	FL



gull wing package



flat pack

APPLICABLE SPECIFICATIONS

- **■** MIL-STD-1553B
- **■** MIL-STD-202
- MIL-T-10727
- **MIL-PRF-21038**
- ISO 9002

Impedance	see table, next page
Droop	≤ 20%
Overshoot	± 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

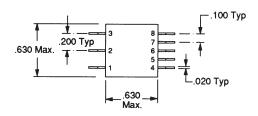
PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX.	IMPEDANCE (ohms) MIN.
(XXX1553-1) 1	1-3:4-8	1CT:1CT	1-3 = 3.0	(1-3)
	1-3:5-7	1CT:.707CT	4-8 = 3.0	4,000
(XXX1553-2)	1-3:4-8	1.4CT:1CT	1-3 = 3.5	(1-3)
	1-3:5-7	2CT:1CT	4-8 = 3.0	7,200
(XXX1553-3)	1-3:4-8	1.25CT:1CT	1-3 = 3.2	(1-3)
	1-3:5-7	1.66CT:1CT	4-8 = 3.0	4,000
(XXX1553-5) 2	1-3:4-8	1CT:2.12CT	1-3 = 1.0	(4-8)
	1-3:5-7	1CT:1.5CT	4-8 = 3.5	4,000
(XXX1553-45) 2	1-3:4-8	1CT:2.5CT	1-3 = 1.0	(4-8)
	1-3:5-7	1CT:1.79CT	4-8 = 3.5	4,000

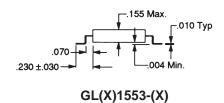
low profiledual ratiosurface-mount

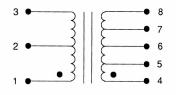
 $[\]fbox{2}$ Designed for transceivers utilizing a single supply voltage (+5V).

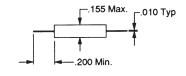
operating temp.	gull wing package	flat pack
0° to 70°C	GLC	FLC
-40° to +85°C	GLN	FLN
-55° to +125°C	GL	FL

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









FL(X)1553-(X)

¹ Refer to prefix table (below) to select temperature range and package.

Through the board <u>dual</u> low profile MIL-PRF-21038 Interface Transformers

These non-QPL interface transformers are built and tested in ISO 9002 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 $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.

- dual ratio, dual interface (see schematic)
- through the board package
- for use in MIL-STD-1553 applications
- low profile, 0.155 in. height
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility

operating temp.	prefix
0° to 70°C	DTLC
-40° to +85°C	DTLN
-55° to +125°C	DTL

APPLICABLE SPECIFICATIONS

- MIL-STD-1553B
- **MIL-STD-202**
- MIL-T-10727
- MIL-PRF-21038
- ISO 9002

Impedance	see table, next page
Droop	≤ 20%
Overshoot	<u>+</u> 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

dual interfacelow profiledual ratiothrough the board

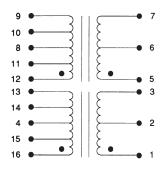
CHARACTERISTICS

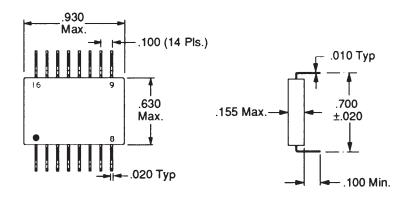
PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX.	IMPEDANCE (ohms) MI
(XXXX)1553-1 1	1-3:16-13 5-7:12-9	1CT:1CT	1-3, 5-7 = 3.0 16-13, 12-9 = 3.0	(1-3, 5-7) 4,000
	1-3:15-14 5-7:11-10	1CT:.707CT		
(XXXX)1553-2	1-3:16-13 5-7:12-9	1.4CT:1CT	1-3, 5-7 = 3.5 16-13, 12-9 = 3.0	(1-3, 5-7) 7,200
	1-3:15-14 5-7:11-10	2CT:1CT		
(XXXX)1553-3	1-3:16-13 5-7:12-9	1.25CT:1CT	1-3, 5-7 = 3.2 16-13, 12-9 = 3.0	(1-3, 5-7) 4,000
	1-3:15-14 5-7:11-10	1.66CT:1CT		
(XXXX)1553-5 2	1-3:16-13 5-7:12-9	1CT:2.12CT	1-3, 5-7 = 1.0 16-13, 12-9 = 3.5	(16-13, 12-9) 4,000
	1-3:15-14 5-7:11-10	1CT:1.5CT		
(XXXX)1553-45 2	1-3:16-13 5-7:12-9	1CT:2.5CT	1-3, 5-7 = 1.0 16-13, 12-9 = 3.5	(16-13, 12-9) 4,000
	1-3:15-14 5-7:11-10	1CT:1.79CT		

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

operating temp.	prefix
0° to 70°C	DTLC
-40° to +85°C	DTLN
-55° to +125°C	DTL

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



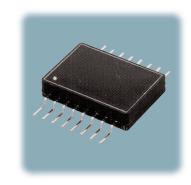


Surface mount dual low profile MIL-PRF-21038 Interface Transformers

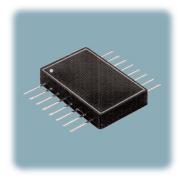
These non-QPL interface transformers are built and tested in ISO 9002 approved facilities. They conform to all electrical and physical parameters of MIL-PRF-21038/27. Choose one of three operating temperature ranges, including 0° to $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.

- dual ratio, dual interface (see schematic)
- for use in MIL-STD-1553 applications
- low profile, 0.155 in. height
- dual ratio in a single package
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility
- three available operating temperatures; two packages:

operating temp.	gull wing package	flat pack
0° to 70°C	DGLC	DFLC
-40° to +85°C	DGLN	DFLN
-55° to +125°C	DGL	DFL



gull wing package



flat pack

APPLICABLE SPECIFICATIONS

- MIL-STD-1553B
- MIL-STD-202
- MIL-T-10727
- MIL-PRF-21038
- ISO 9002

Impedance	see table, next page
Droop	≤ 20%
Overshoot	<u>+</u> 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

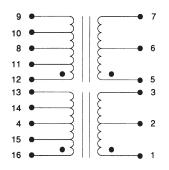
PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) M AX.	IMPEDANCE (ohms) MIN.
(XXXX1553-1) 1	1-3:16-13 5-7:12-9	1CT:1CT	1-3, 5-7 = 3.0 16-13, 12-9 = 3.0	(1-3, 5-9) 4,000
,	1-3:15-14 5-7:11-10	1CT::707CT		
(XXXX1553-2)	1-3:16-13 5-7:12-9	1.4CT:1CT	1-3, 5-7 = 3.5 16-13, 12-9 = 3.0	(1-3, 5-7) 7,200
	1-3:15-14 5-7:11-10	2CT:1CT		
(XXXX1553-3)	1-3:16-13 5-7:12-9	1.25CT:1CT	1-3, 5-7 = 3.2 16-13, 12-9 = 3.0	(1-3, 5-7) 4,000
	1-3:15-14 5-7:11-10	1.66CT:1CT		
(XXXX1553-5) ²	1-3:16-13 5-7:12-9	1CT:2.12CT	1-3, 5-7 = 1.0 16-13, 12-9 = 3.5	(16-13, 12-9) 4,000
	1-3:15-14 5-7:11-10	1CT:1.5CT		
(XXXX1553-45) ²	1-3:16-13 5-7:12-9	1CT:2.5CT	1-3, 5-7 = 1.0 16-13, 12-9 = 3.5	(16-13, 12-9) 4,000
	1-3:15-14 5-7:11-10	1CT:1.79CT		

■ surface-mount

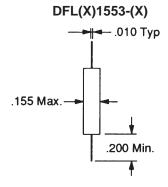
dual interfacelow profiledual ratio

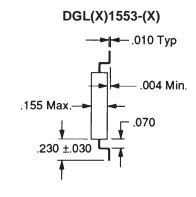
- 1 Refer to prefix table (below) to select temperature range and package.
- 2 Designed for transceivers utilizing a single supply voltage (+5V).

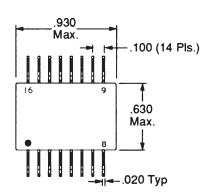
operating temp.	gull wing package	flat pack
0° to 70°C	DGLC	DFLC
-40° to +85°C	DGLN	DFLN
-55° to +125°C	DGL	DFL



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





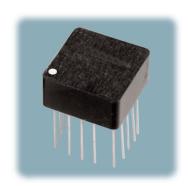


Through the board dual stacked MIL-PRF-21038 Interface Transformers

These non-QPL interface transformers are built and tested in ISO 9002 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 $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.

- dual ratio, dual interface (see schematic)
- through the board package
- for use in MIL-STD-1553 applications
- vertically stacked for minimum XY area
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility

operating temp.	prefix
0° to 70°C	STQC
-40° to +85°C	STQN
-55° to +125°C	STQ



APPLICABLE SPECIFICATIONS

- MIL-STD-1553B
- MIL-STD-202
- MIL-T-10727
- **■** MIL-PRF-21038
- ISO 9002

Impedance	see table, next page
Droop	≤ 20%
Overshoot	± 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

dual interfacestackeddual ratiothrough the board

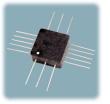
CHARACTERISTICS

PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX	IMPEDANCE (ohms) MIN
(XXXX)1553-1 1	1-3:4-8 (11-13:14-18)	1CT:1CT	1-3 (11-13) 3.5	(1-3 & 11-13)
	1-3:5-7 (11-13:15-17)	1.41CT:1CT	4-8 (14-18) 3.0	4,000
(XXXX)1553-2	1-3:4-8 (11-13:14-18)	1.4CT:1CT	1-3 (11-13) 3.0	(1-3 & 11-13)
	1-3:5-7 (11-13:15-17)	2CT:1CT	4-8 (14-18) 3.0	7,200
(XXXX)1553-3	1-3:4-8 (11-13:14-18)	1.25CT:1CT	1-3 (11-13) 3.2	(1-3 & 11-13)
	1-3:5-7 (11-13:15-17)	1.66CT:1CT	4-8 (14-18) 3.0	4,000
(XXXX)1553-5 2	1-3:4-8 (11-13:14-18)	1CT:2.12CT	1-3 (11-13) 1.0	(4-8 & 14-18)
	1-3:5-7 (11-13:15-17)	1CT:1.5CT	4-8 (14-18) 3.5	4,000
(XXXX)1553-45 ²	1-3:4-8 (11-13:14-18)	1CT:2.5CT	1-3 (11-13) 1.0	(4-8 & 14-18)
	1-3:5-7 (11-13:15-17)	1CT:1.79CT	4-8 (14-18) 3.5	4,000

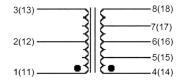
- 1 Refer to prefix table (below) to select temperature range and package.
- $\fbox{2}$ Designed for transceivers utilizing a single supply voltage (+5V).

operating temp.	prefix
0° to 70°C	STQC
-40° to +85°C	STQN
-55° to +125°C	STQ

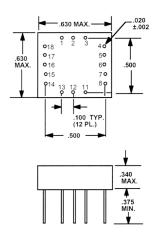




Also available in gull wing and flat pack configurations for surface mounting

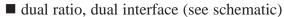


- 1. All dimensions are in inches.
- 2. Tolerances: .xx = +.008
- 3. All specifications and dimensions are subject to change without notice.



Surface mount dual stacked MIL-PRF-21038 Interface Transformers

These non-QPL interface transformers are built and tested in ISO 9002 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 $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.

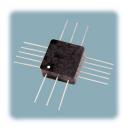


- surface mount packages
- for use in MIL-STD-1553 applications
- vertically stacked for minimum XY area
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility

operating temp.	gull wing package	flat pack
0° to 70°C	SGQC	SFQC
-40° to +85°C	SGQN	SFQN
-55° to +125°C	SGQ	SFQ



gull wing package



flat pack

APPLICABLE SPECIFICATIONS

- MIL-STD-1553B
- **MIL-STD-202**
- MIL-T-10727
- MIL-PRF-21038
- ISO 9002

Impedance	see table, next page
Droop	≤ 20%
Overshoot	<u>+</u> 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

dual interfacestackeddual ratiosurface mount

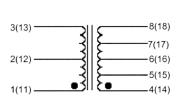
CHARACTERISTICS

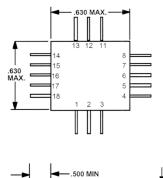
PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX	IMPEDANCE (ohms) Min
(XXXX)1553-1 1	1-3:4-8 (11-13:14-18)	1CT:1CT	1-3 (11-13) 3.5	(1-3 & 11-13)
	1-3:5-7 (11-13:15-17)	1.41CT:1CT	4-8 (14-18) 3.0	4,000
(XXXX)1553-2	1-3:4-8 (11-13:14-18)	1.4CT:1CT	1-3 (11-13) 3.0	(1-3 & 11-13)
	1-3:5-7 (11-13:15-17)	2CT:1CT	4-8 (14-18) 3.0	7,200
(XXXX)1553-3	1-3:4-8 (11-13:14-18)	1.25CT:1CT	1-3 (11-13) 3.2	(1-3 & 11-13)
	1-3:5-7 (11-13:15-17)	1.66CT:1CT	4-8 (14-18) 3.0	4,000
(XXXX)1553-5 2	1-3:4-8 (11-13:14-18)	1CT:2.12CT	1-3 (11-13) 1.0	(4-8 & 14-18)
	1-3:5-7 (11-13:15-17)	1CT:1.5CT	4-8 (14-18) 3.5	4,000
(XXXX)1553-45 2	1-3:4-8 (11-13:14-18)	1CT:2.5CT	1-3 (11-13) 1.0	(4-8 & 14-18)
	1-3:5-7 (11-13:15-17)	1CT:1.79CT	4-8 (14-18) 3.5	4,000

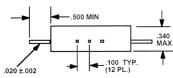
- $\ensuremath{\boxed{1}}$ Refer to prefix table (below) to select temperature range and package.
- $\fbox{2}$ Designed for transceivers utilizing a single supply voltage (+5V).

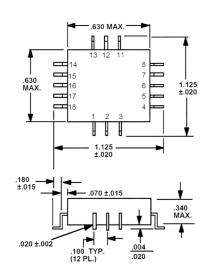
operating temp.	gull wing package	flat pack
0° to 70°C	SGQC	SFQC
-40° to +85°C	SGQN	SFQN
-55° to +125°C	SGQ	SFQ

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





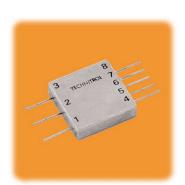




Surface mount hermetically sealed MIL-PRF-21038 Interface Transformers

These hermetically sealed non-QPL interface transformers conform to all electrical and physical parameters of MIL-PRF-21038/27 and provide performance as required over -55° to +125°. Built and tested in ISO 9002 approved facilities. Flat pack surface mount package.

- dual ratio, single interface
- for use in MIL-STD-1553 applications
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility
- -55° to +125° C operating temperatures



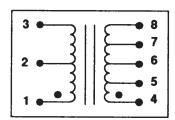
APPLICABLE SPECIFICATIONS

- **MIL-STD-1553B**
- **MIL-STD-202**
- MIL-I-45208
- MIL-T-10727
- MIL-PRF-21038
- ISO 9002

Impedance	see table, next page
Droop	≤ 20%
Overshoot	<u>+</u> 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	55° to +125°C
Weight	≤ 5 grams
Insulation resistance (min)	10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

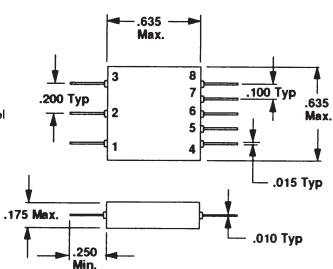
PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX	IMPEDANCE (ohms) MIN
H1553-1	1-3:4-8	1CT:1CT	1-3 3.0	(1-3)
	1-3:5-7	1CT:.707CT	4-8 3.0	4000
H1553-2	1-3:4-8	1.4CT:1CT	1-3 3.5	(1-3)
	1-3:5-7	2CT:1CT	4-8 3.0	7,200
H1553-3	1-3:4-8	1.25CT:1CT	1-3 3.2	(1-3)
	1-3:5-7	1.66CT:1CT	4-8 3.0	4000
H1553-5*	1-3:4-8	1CT:2.12CT	1-3 1.0	(4-8)
	1-3:5-7	1CT:1.5CT	4-8 3.5	4,000
H1553-45*	1-3:4-8	1CT:2.50CT	1-3 1.0	(4-8)
	1-3:5-7	1CT:1.79CT	4-8 3.5	4,000

- hermetically sealed
- single interface
 - dual ratio
 - surface-mount flat pack



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

Note: Case and cover are nickel plated Kovar. Leads are nickel-plated Kovar. Other lead finishes available.



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

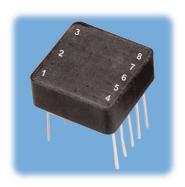
Value Series (COTS) through the board MIL-PRF-21038 Interface Transformers

These non-QPL interface transformers are built and tested in ISO 9002 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 $+70^{\circ}$ C, -40° to $+85^{\circ}$ C, or -55° to $+125^{\circ}$ C.

- dual ratio, single interface (see schematic)
- through the board package
- for use in MIL-STD-1553 applications
- standard height, 0.250 in.
- performance to MIL-PRF-21038/27 requirements
- built in ISO 9002 facility

QPL COTS

The transformer package shown on this page is also available fully qualified to MIL-PRF-21038/27 requirements.



APPLICABLE SPECIFICATIONS

- MIL-STD-1553B
- **MIL-STD-202**
- MIL-T-10727
- MIL-PRF-21038
- ISO 9002

operating temp.	prefix
0° to 70°C	С
-40° to +85°C	N
-55° to +125°C	TQ

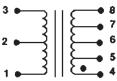
Impedance	see table, next page
Droop	≤ 20%
Overshoot	<u>+</u> 1V max
Common mode rejection (CMR)	≥ 45 dB
Frequency range (no load)	75 kHz to 1MHz
Operating temperature range	see table, next page
Weight	≤ 5 grams
Insulation resistance (min)	. 10K megohms @ 250 Vdc
Dielectric withstanding voltage	100 Vrms

PART NO.	TERMINALS	RATIO (±3%)	RDC (ohms) MAX.	IMPEDANCE (ohms) MIN.
(X)1553-1 1	1-3:4-8	1CT:1CT	1-3 = 3.0	(1-3)
	1-3:5-7	1CT:.707CT	4-8 = 3.0	4,000
(X)1553-2	1-3:4-8	1.4CT:1CT	1-3 = 3.5	(1-3)
	1-3:5-7	2CT:1CT	4-8 = 3.0	7,200
(X)1553-3 ²	1-3:4-8	1.25CT:1CT	1-3 = 3.2	(1-3)
	1-3:5-7	1.66CT:1CT	4-8 = 3.0	4,000
(X)1553-5 ²	1-3:4-8	1CT:2.12CT	1-3 = 1.0	(4-8)
	1-3:5-7	1CT:1.5CT	4-8 = 3.5	4,000
(X)1553-45 2	1-3:4-8	1CT:2.5CT	1-3 = 1.0	(4-8)
	1-3:5-7	1CT:1.79CT	4-8 = 3.5	4,000

- standard profile
- dual ratio
- through the board

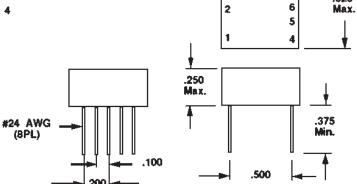
- 1 Refer to prefix table (right) to select temperature range.
- 2 Designed for transceivers utilizing a single supply voltage (+5V).

operating temp.	prefix
0° to 70°C	С
-40° to +85°C	N
-55° to +125°C	TQ



Notes:

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



.625 Max.

8 7

.625

WARRANTY

Pulse Specialty Components warrants for a period of 90 days from the date of shipment, that under normal use and service, its products will be free from defects in workmanship and material. Pulse Specialty Components' sole responsibility under this warranty is, at its option, to repair or replace, without charge, any defective product or part, or to credit buyer for the purchase price of such defective product, provided:

- 1) Buyer promptly notifies Pulse Specialty Components in writing within the warranty period, and
- 2) The defective product or part is returned to Pulse Specialty Components with transportation charges prepaid by Buyer, and
- 3) Pulse Specialty Components examination of such product shall disclose to its satisfaction that said defect exists and has not been caused by misuse, neglect, improper installation, repair or alteration, or accident.

EXCEPT FOR THE ABOVE WARRANTY AND THE IMPLIED WARRANTY OF TITLE, PULSE SPECIALTY COMPONENTS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. NO LIABILITY IS ASSUMED FOR EXPENDABLE ITEMS SUCH AS LAMPS AND FUSES. PULSE SPECIALTY COMPONENTS WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES UNDER ANY CIRCUMSTANCES.



Catalog NQPL-0025 9/1//20/00