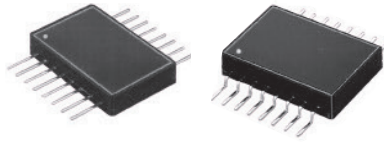


MIL-STD-1553 TRANSFORMERS

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> | Flat Pack | Gull-Wing | 0°C to +70°C -40°C to +85°C -55°C to +125°C |
| | DFLC | DGLC | |
| | DFLN | DGLN | |
| | DFL | DGL | |
| Weight | 5 grams MAX | | |
| Insulation Resistance (MIN) | 10K MΩ @ 250Vdc | | |
| Dielectric Withstanding Voltage | 100Vrms | | |

Characteristics

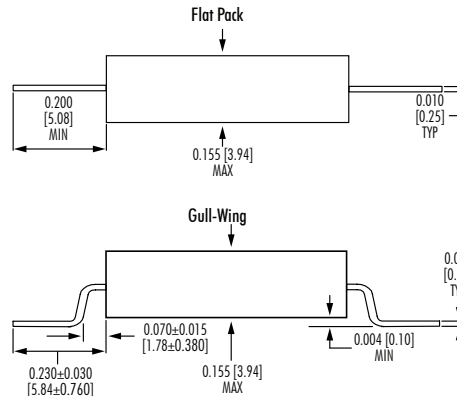
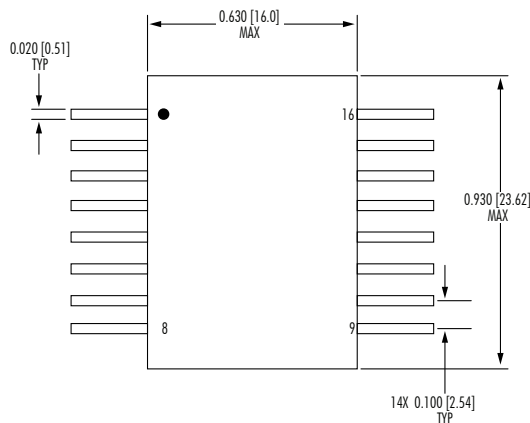
| Part Number | Terminals | Ratio | RDC MAX | Impedance MIN |
|----------------|---|--------------------------|-------------------------------------|------------------------|
| | | (±3%) | (Ω) | (Ω) |
| (XXXX)1553-1 | 1-3:16-13 / 5-7:12-9 1-3:15-14 / 5-7:11-10 | 1CT:1CT 1CT:0.707CT | 1-3, 5-7 = 3.0 16-13, 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:

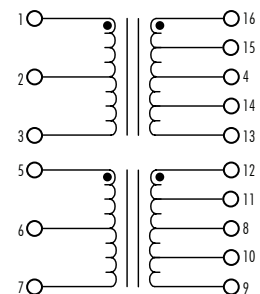
1. Refer to the Summary Performance Specifications Table above to select the prefix for your desired Operating Temperature Range. Replace (XXXX) from the part number in the table with the desired prefix: DFLC, DFLN, DFL, DGLC, DGLN, DGL.
- * Designed for transceivers utilizing a single supply voltage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

Mechanicals

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



Electrical Schematics

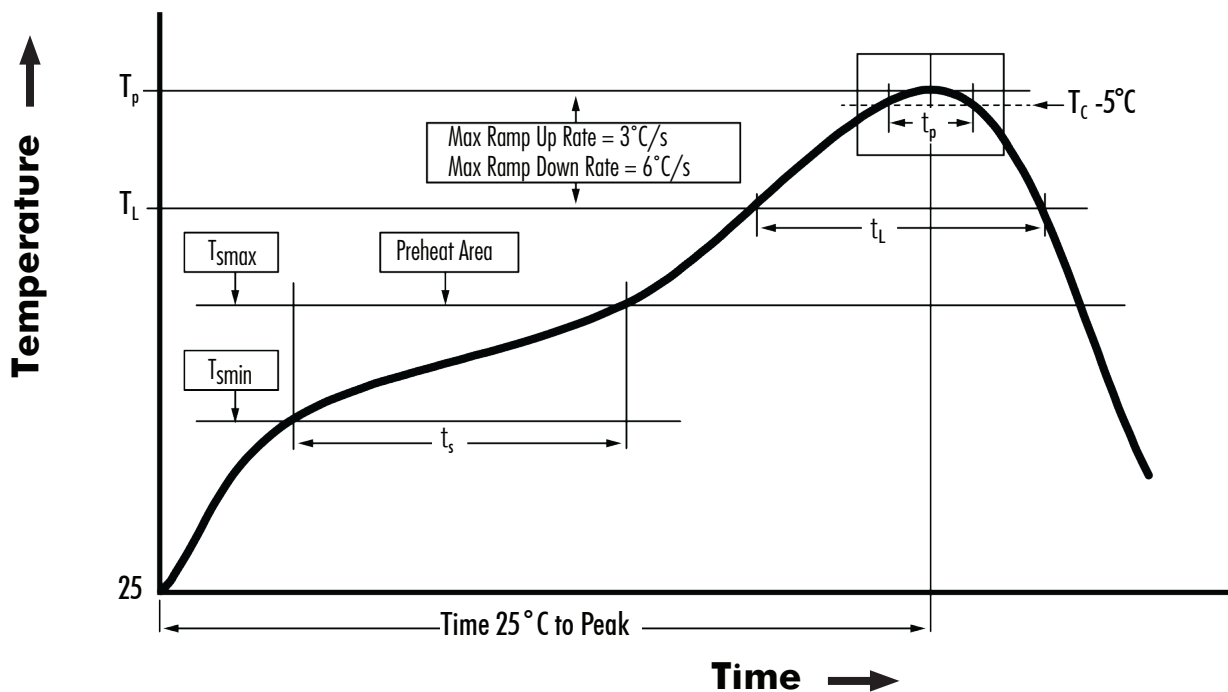


MIL-STD-1553 TRANSFORMERS

Low Profile Dual SMT Non-QPL Interface Transformers
Ruggedized



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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