

MIL-STD-1553 Transformers

Low profile 3.3V Pulse Transformers

Ruggedized



⚙️ Dual ratio in a single transformer package (see Schematic)

⚙️ Weight: ≤ 5.0 grams

⚙️ Applicable specifications

MIL-STD-1553B

MIL-STD-202

MIL-PRF-21038

AS9001

⚙️ Maximum Re-flow Temperature for SMT parts: 235°C

Electrical Specifications @ 25 °C – Operating Temperature – 55 °C to +125 °C

Part Number	Terminals	Ratio ($\pm 3\%$)	DC Resistance (Ω MAX)	Impedance (Ω MIN)	Droop	Overshoot	CMR	Frequency Range (No Load)	IR @ 250Vdc (MIN)	DWV
Q1553-70	1-3:4-8 1-3:5-7	1.0CT:3.0CT 1.0CT:2.15CT	1-3 = 0.35 4-8 = 3.50	4-8 4000	20% MAX	$\pm 1V$ MIN	45db MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
Q1553-71	1-3:4-8 1-3:5-7	1CT:3.54CT 1CT:2.50CT	1-3 = 0.35 4-8 = 3.50	4-8 4000	20% MAX	$\pm 1V$ MIN	45db MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
SMQ1553-70	1-3:4-8 1-3:5-7	1.0CT:3.0CT 1.0CT:2.15CT	(1-3) 0.35 (4-8) 3.5	4-8 4000	20% max	$\pm 1V$ MAX	45dB MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
SMQ1553-71	1-3:4-8 1-3:5-7	1CT:3.54CT 1CT:2.50CT	(1-3) 0.35 (4-8) 3.5	4-8 4000	20% max	$\pm 1V$ MAX	45dB MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
GL1553-70	1-3:4-8 1-3:5-7	1.0CT:3.0CT 1.0CT:2.15CT	(1-3) 0.35 (4-8) 3.5	4-8 4000	20% MAX	$\pm 1V$ MIN	45db MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
GL1553-71	1-3:4-8 1-3:5-7	1CT:3.54CT 1CT:2.50CT	(1-3) 0.35 (4-8) 3.5	4-8 4000	20% max	$\pm 1V$ MAX	45dB MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
DGL1553-70	1-3:1613/5-7:12-9 1-3:15-14/5-7:11-10	1CT:3.0CT 1CT:2.15CT	(1-3),(5-7) 0.35 (16-13),(12-9) 3.5	16-13&12-9 4000	20% max	$\pm 1V$ MAX	45dB MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms
DGL1553-71	1-3:1613/5-7:12-9 1-3:15-14/5-7:11-10	1CT:3.54CT 1CT:2.50CT	(1-3),(5-7) 0.35 (16-13),(12-9) 3.5	16-13&12-9 4000	20% max	$\pm 1V$ MAX	45dB MIN	75kHz to 1MHz	10K $M\Omega$	100 Vrms



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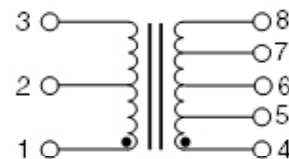
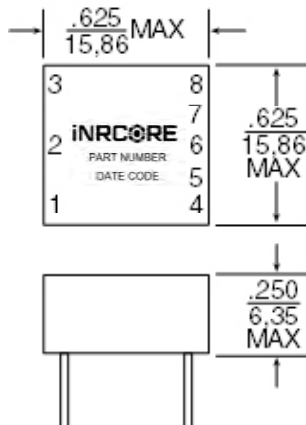
Ruggedized



Mechanical

Electrical Schematic

Q1553



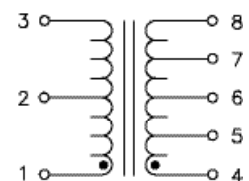
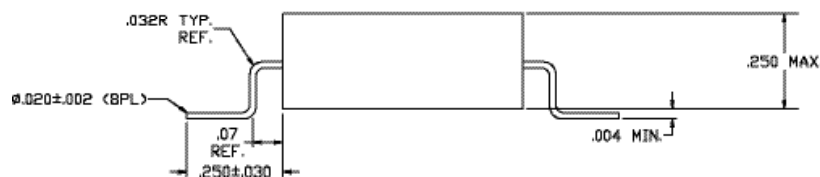
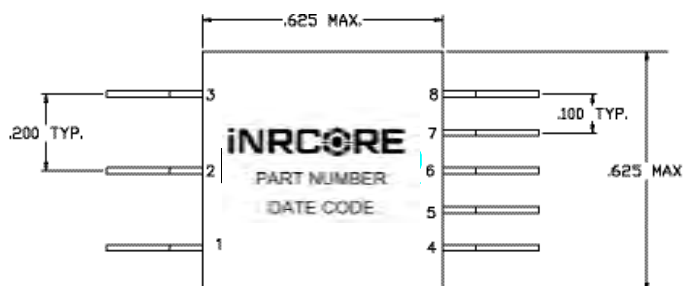
Notes:

1. All dimensions are in inches.
2. Tolerances: .xx = +.008
3. All specifications and dimensions are subject to change without notice.
4. MSL - 1
5. Tube - 20 pieces

Mechanical

Electrical Schematic

SMQ1553



Notes:

1. All dimensions are in inches.
2. Tolerances: .xx = +.008
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4. MSL - 3
5. Tape & Reel Size- 300 pieces



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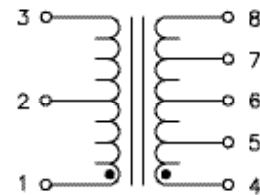
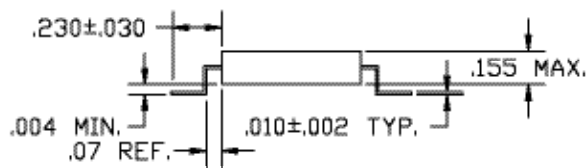
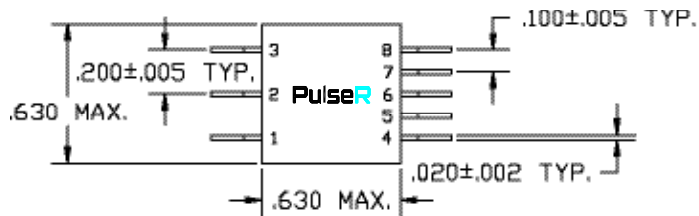
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Mechanical

Electrical Schematic

GL1553



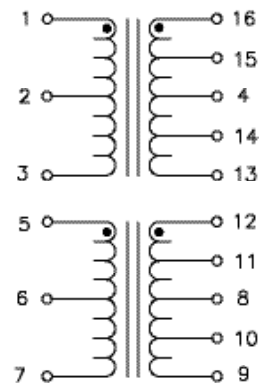
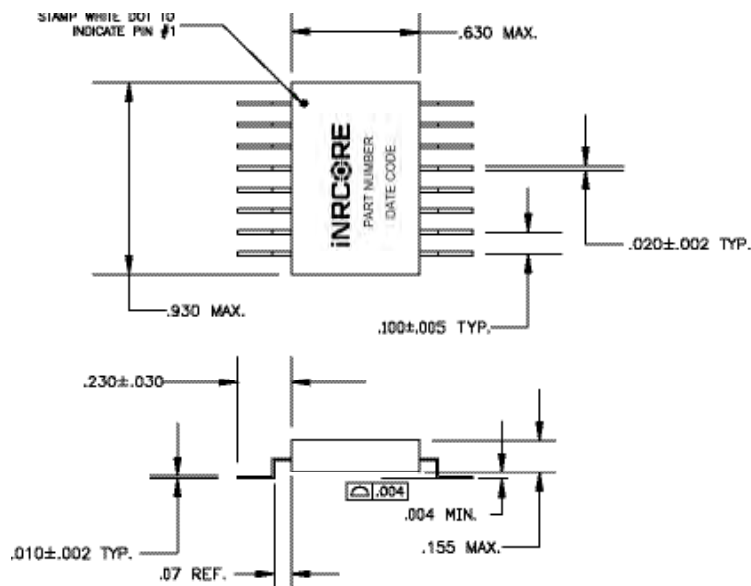
Notes:

1. All dimensions are in inches.
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3. All specifications and dimensions are subject to change without notice.
4. MSL - 3
5. Tape & Reel Size- 350 pieces

Mechanical

Electrical Schematic

DGL1553



Notes:

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2. Tolerances: .xx = +.008
3. All specifications and dimensions are subject to change without notice.
4. MSL - 3
5. Tape & Reel Size- 300 pieces



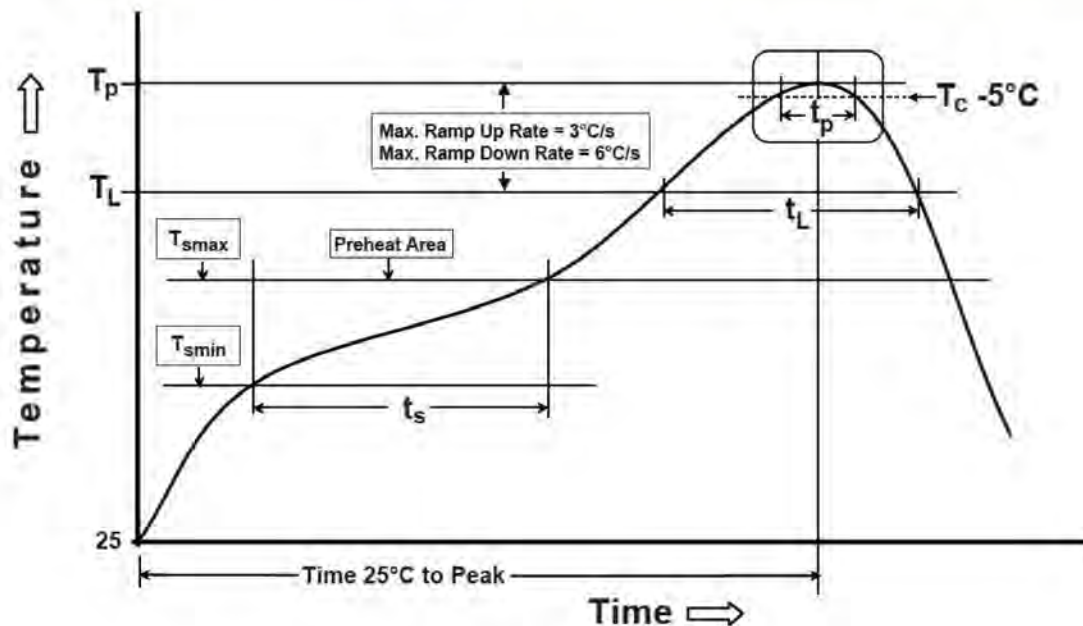
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Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



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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