

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



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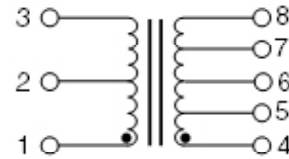
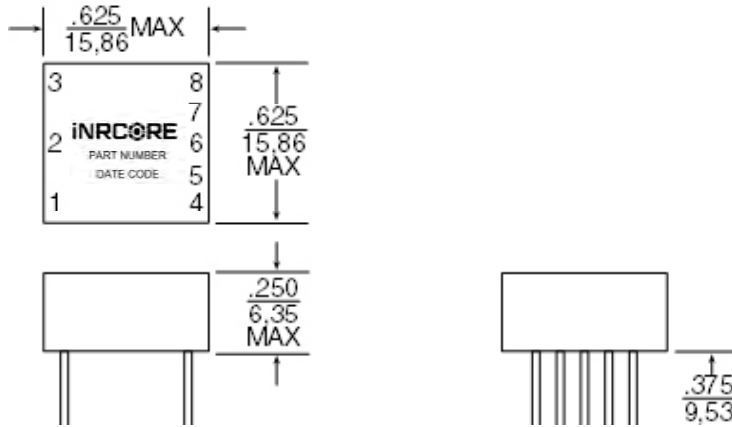
Ruggedized



Mechanical

Electrical Schematic

Q1553



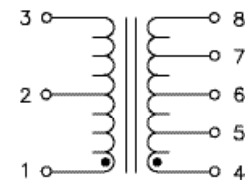
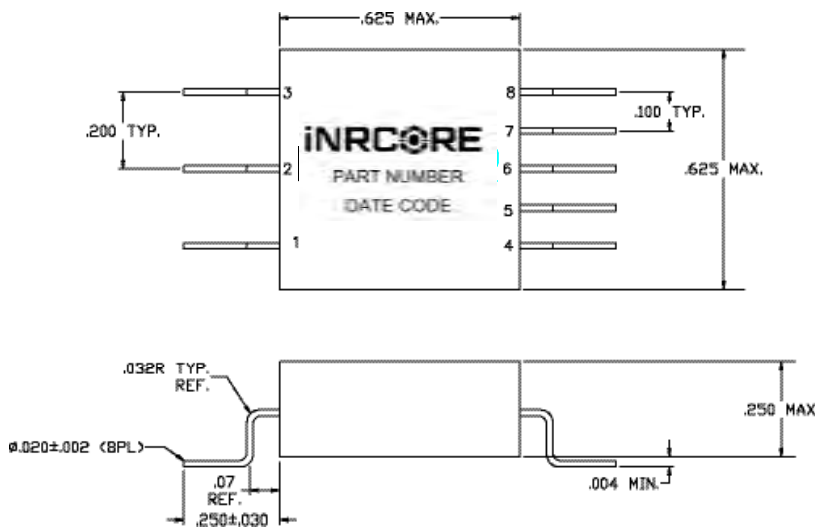
Notes:

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



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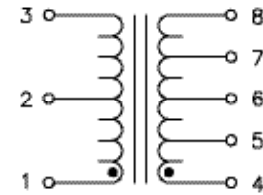
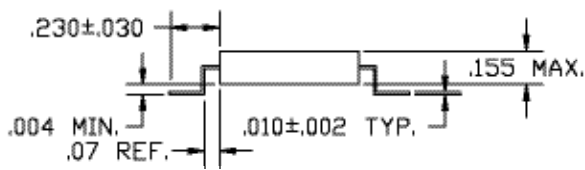
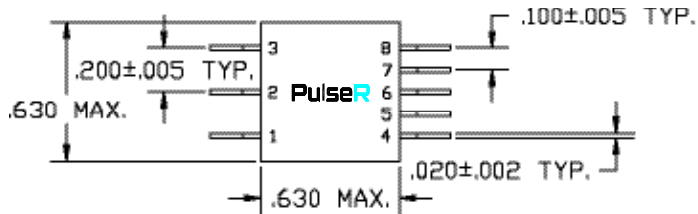
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Mechanical

Electrical Schematic

GL1553



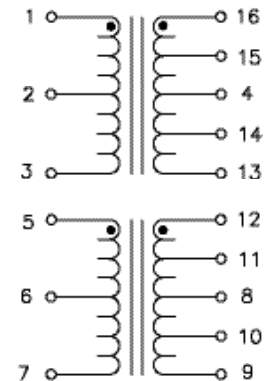
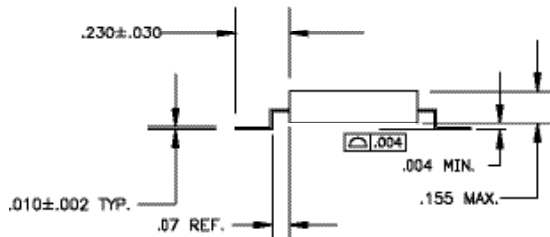
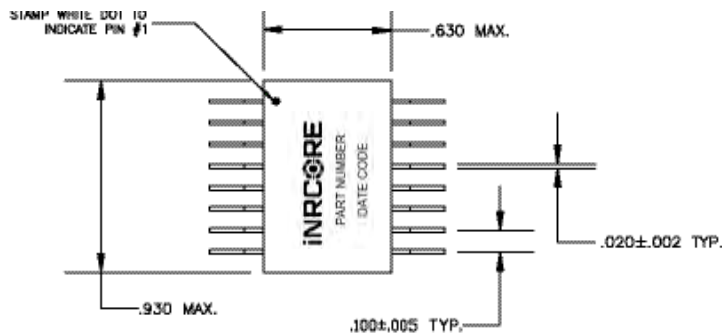
Notes:

1. All dimensions are in inches.
2. Tolerances: .xx = +.008
3. All specifications and dimensions are subject to change without notice.
4. MSL - 3
5. Tape & Reel Size- 350 pieces

Mechanical

Electrical Schematic

DGL1553

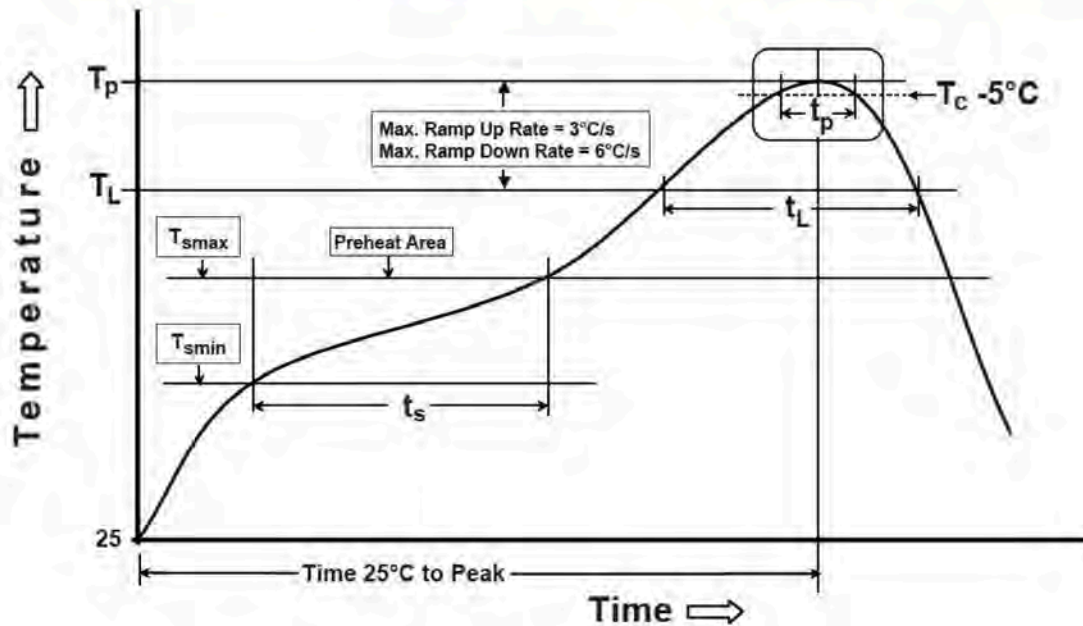


Notes:

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



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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