## **MIL-STD-1553 TRANSFORMERS**

SMT Single Transformers Ruggedized





Summary Performance Specifications							
Droop	20% MAX						
Overshoot	±1V MAX						
Common Mode Rejection (CMR)	45dB MIN						
Frequency Range (no load)	75kHz - 1MHz						
Operating Temperature Range	-55°C to +130°C						
Insulation Resistance (MIN)	10K MΩ @ 250Vdc						
Dielectric Withstanding Voltage	100Vrms						

• Single transformer package • Low Profile: 0.185" height

• Storage Temperature:  $-55^{\circ}$ C to  $+130^{\circ}$ C

• Max Reflow Temperature: 235°C

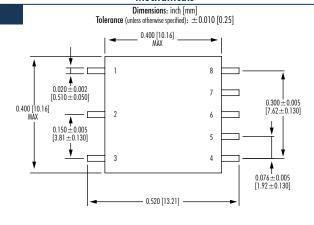
• Weight: ≤3.0 grams • Lead Finish: Sn63/Pb37 Moisture Sensitivity Level: 3

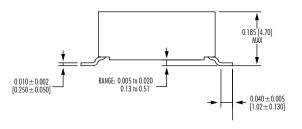
Characteristics								
Part		Turns Ratio	RDC MAX	Impedance MIN				
Number	Terminals	(±3%)	(W)	(W)				
SMG1553-60	1-3:4-8	1.25CT:1CT	(1-3) 2.4, (4-8) 2.2	(1-3) 4,000				
SMG1553-61	1-3:5-7	1.66CT:1CT	(1-3) 2.4, (5-7) 1.5	(1-3) 4,000				
SMG1553-65	1-3:4-8	1CT:2.50CT	(1-3) 1.0, (4-8) 2.6	(4-8) 4,000				
SMG1553-66	1-3:5-7	1CT:1.79CT	(1-3) 1.3, (5-7) 2.6	(5-7) 4,000				
SMG1553-67	1-3:5-7	1CT:2.70CT	(1-3) 0.50, (5-7) 2.5	(5-7) 4,000				
SMG1553-68	1-3:4-8	1CT:3.75CT	(1-3) 0.40, (4-8) 2.5	(4-8) 4,000				

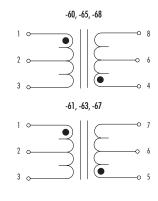
#### Mechanicals

### **Electrical Schematics**

### SMG1553-6X







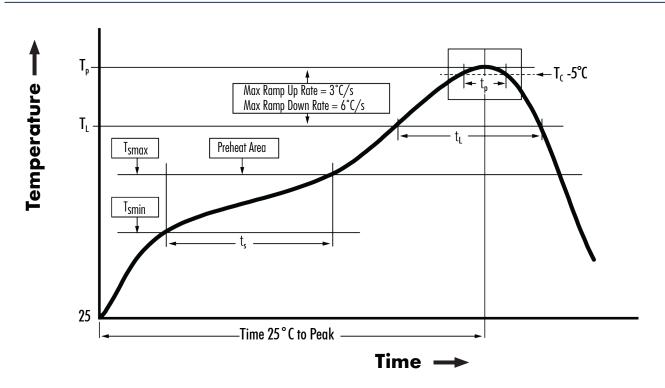


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### Recommended Reflow Profile (Based on J-STD-020D)



T <sub>smin</sub> (°C)	T <sub>smax</sub> (°C)	T <sub>ւ</sub> (°C)	T <sub>P</sub> (°C MAX)	† <sub>s</sub> (s)	t <sub>.</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)
Tin/Lead Profile									
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 number of reflow cycles not to exceed 2.



iNRCORE, LLC 311 Sinclair Road, Bristol, PA 19007-6812 USA Tel: +1.215.781.6400 Fax: +1.215.781.6430

www.iNRCORE.com