# SMPTE DIGITAL VIDEO BALUNS

Ruggedized

- Transforms a balanced differential signal to a grounded, unbalanced signal - and vice versa (bi-directional operation)
- SMTPE 424M/425M, 2.973 Gpbs data rate
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +125°C
- Moisture Sensitivity Level: 3
- Epoxy Encapsulated

## Electrical Specifications @ 25°C

| Part Number | Data Rate (Gbps) | Impedance Unbalanced (Ω) P (2-3) | Impedance Balanced (Ω) P (7-6) | Insertion Loss @ 1.5 GHz (dB MAX) | Return Loss @ 1.5 GHz (dB TYP) |
|---|---|---|---|---|---|
| TA-0751003G | 2.973 | 75 | 100 | 4 | 6 |
| TA-0751503G | 2.973 | 75 | 150 | 4 | 6 |
| TA-0501003G | 2.973 | 50 | 100 | 4 | 6 |
| TA-0750753G | 2.973 | 75 | 75 | 6 | 4 |
| TA-1001003G | 2.973 | 100 | 100 | 6 | 4 |

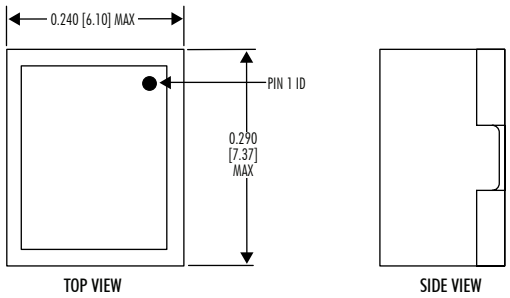
NOTES:

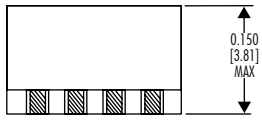
1. Add suffix "**NL**" for RoHS (Sn100 Lead Finish) compliant version; i.e. TA-0751003G becomes **TA-0751003GNL**
2. For Tape & Reel packaging, add "**T**" suffix at the end of the part number: i.e. **TA-0751003GT**

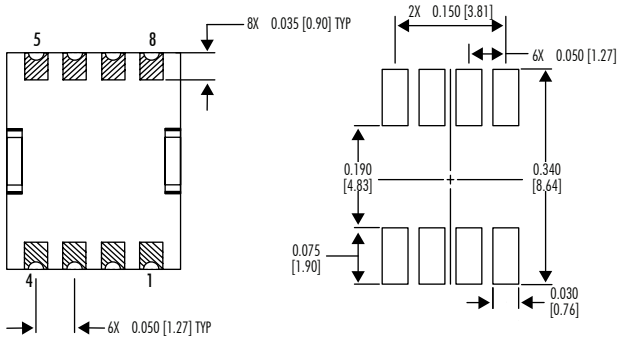
## Mechanicals

**TA-XXXXXXXG**

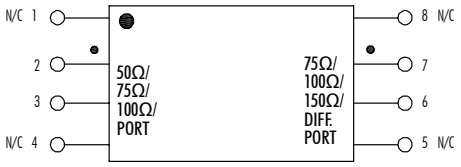
**Dimensions:** inch [mm]
**Tolerance** (unless otherwise specified): ±0.010 [0.25]



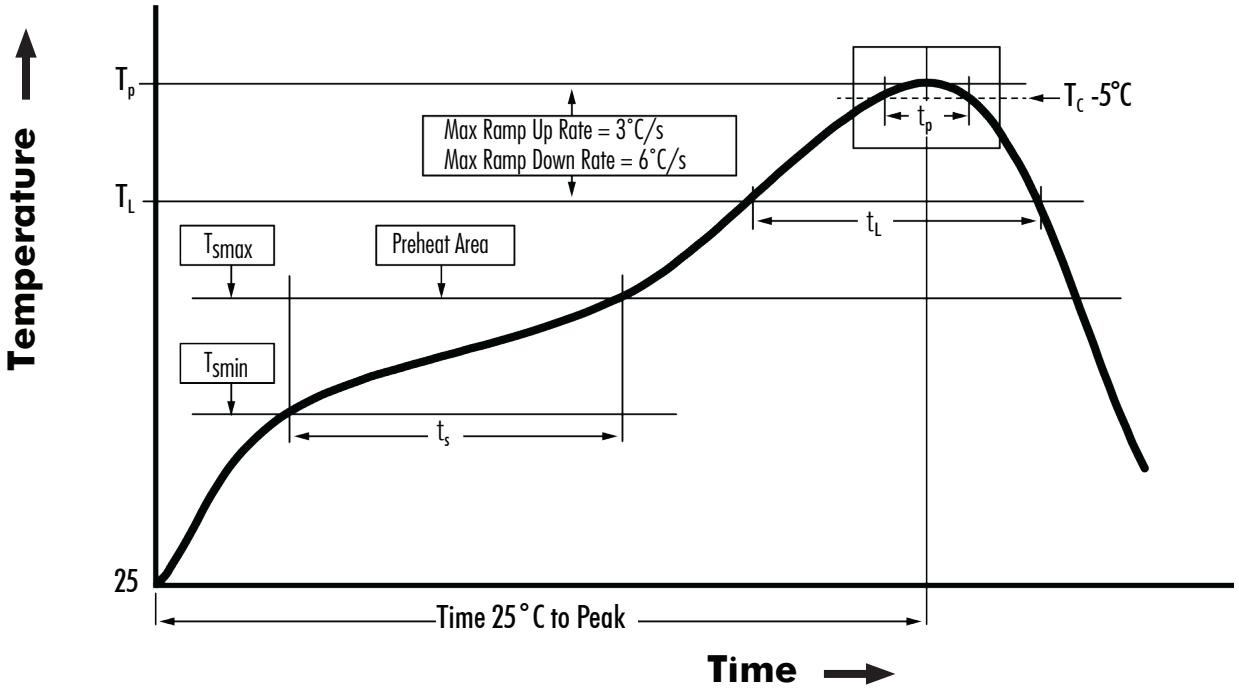




## Electrical Schematics




**Weight:** 0.50 grams MAX

## 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 | 220 | 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.



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