

- Transforms a balanced differential signal to a grounded, unbalanced signal - and vice versa (bi-directional operation)
- SMTPE 424M/425M, 2.973 Gbps 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 ( $\Omega$ ) | Impedance Balanced ( $\Omega$ ) | Insertion Loss @ 1.5 GHz (dB MAX) | Return Loss @ 1.5 GHz (dB TYP) |
|-------------|------------------|-----------------------------------|---------------------------------|-----------------------------------|--------------------------------|
|             |                  | P (2-3)                           | P (7-6)                         |                                   |                                |
| 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:

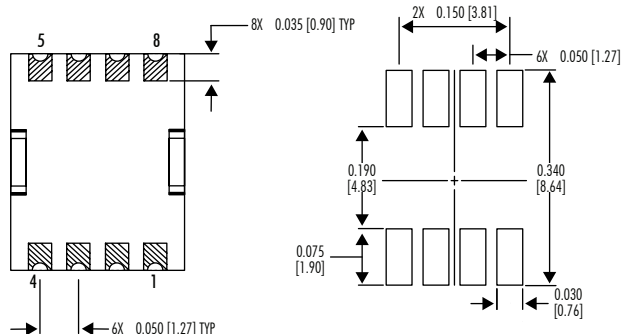
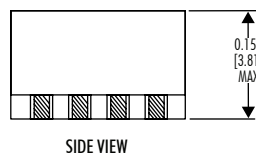
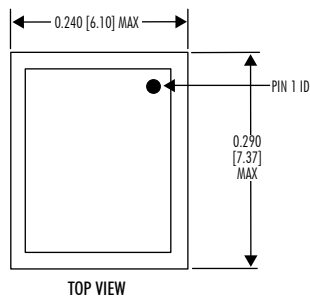
- Add suffix "NL" for RoHS (Sn100 Lead Finish) compliant version; i.e. TA-0751003G becomes TA-0751003GNL
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. TA-0751003GT

## Mechanicals

## Electrical Schematics

TA-XXXXXXG

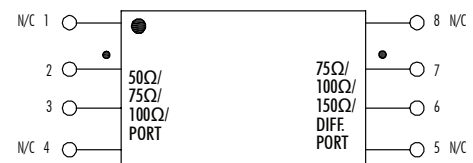
Dimensions: inch [mm]  
Tolerance (unless otherwise specified):  $\pm 0.010$  [0.25]



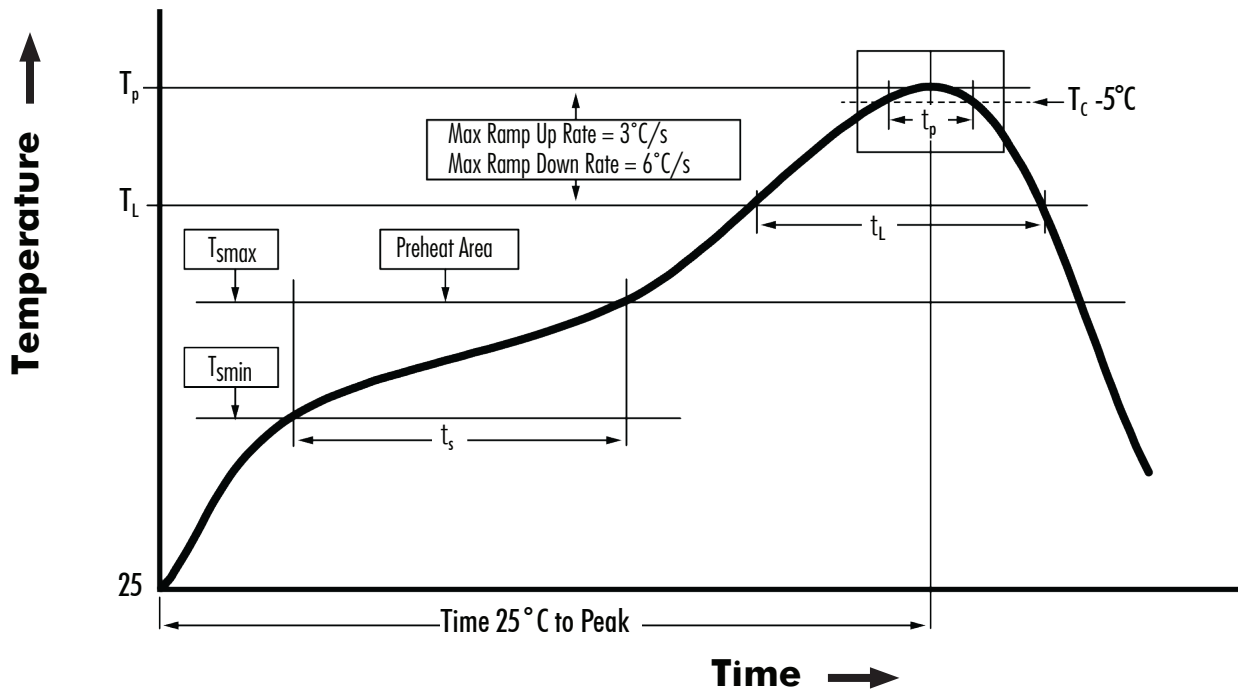
BOTTOM VIEW

PCB PAD PATTERN  
(REFERENCE ONLY)

Weight: 0.50 grams MAX



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



| $T_{smin}$<br>(°C) | $T_{smax}$<br>(°C) | $T_L$<br>(°C) | $T_p$<br>(°C MAX) | $t_s$<br>(s) | $t_L$<br>(s) | $t_p$<br>(s MAX) | Ramp-up rate<br>( $T_L$ to $T_p$ ) | Ramp-down rate<br>( $T_p$ to $T_L$ ) | Time<br>25°C to peak temperature<br>(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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