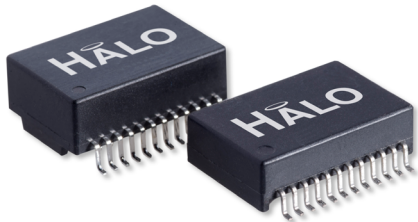


# 2.5G & 5G Transformers

SMD 2.5G/5G BASE-T Single Port Ethernet Isolation Modules



## Product Features:

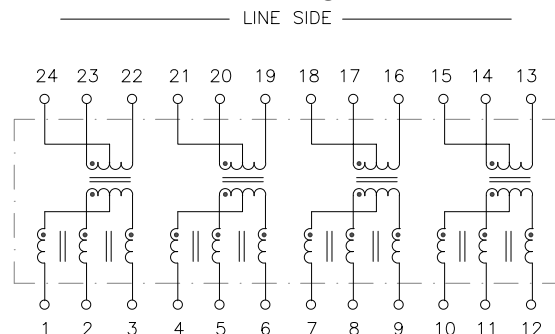
- 2.5G/5GBASE-T Ethernet Transformer/CMR
- IEEE802.3bz/af/at/bt Compliant
- 4PPoE - 4 Pair Power over Ethernet
- UL/EN60950 Recognized
- 100% Electrical Testing
- 1500Vrms Hi-Pot
- Designed for PSE and PD PoE Applications

| Part Number     | Data Rate | Total Power <sup>1</sup> | Current Per Pair | Operating Temp | DCR (max) | Package | Max Height<br>inch [mm] |
|-----------------|-----------|--------------------------|------------------|----------------|-----------|---------|-------------------------|
| TG2G-S102NJLF   | 2.5G      | 30W                      | 350mA            | 0 to +70°C     | 0.6Ω      | NJ      | 0.250 [6.35]            |
| TG2G-E102NJLF   | 2.5G      | 30W                      | 350mA            | -40 to +85°C   | 0.6Ω      | NJ      | 0.250 [6.35]            |
| TG2G-S12NZLF    | 2.5G      | 30W                      | 350mA            | 0 to +70°C     | 0.6Ω      | NZ      | 0.230 [5.84]            |
| TG2G-E12NZLF    | 2.5G      | 30W                      | 350mA            | -40 to +85°C   | 0.6Ω      | NZ      | 0.230 [5.84]            |
| TG2G-HP6NZLF    | 2.5G      | 60W                      | 600mA            | 0 to +70°C     | 0.5Ω      | NZ      | 0.230 [5.84]            |
| TG2G-HPE6NZLF   | 2.5G      | 60W                      | 600mA            | -40 to +85°C   | 0.5Ω      | NZ      | 0.230 [5.84]            |
| TG2G-HP10NZ5LF  | 2.5G      | 90W                      | 1A               | 0 to +70°C     | 0.4Ω      | NZ5     | 0.255 [6.48]            |
| TG2G-HPE10NZ5LF | 2.5G      | 90W                      | 1A               | -40 to +85°C   | 0.4Ω      | NZ5     | 0.255 [6.48]            |
| TG5G-S12NZ5LF   | 5G        | 30W                      | 350mA            | 0 to +70°C     | 0.5Ω      | NZ5     | 0.255 [6.48]            |
| TG5G-E12NZ5LF   | 5G        | 30W                      | 350mA            | -40 to +85°C   | 0.5Ω      | NZ5     | 0.255 [6.48]            |
| TG5G-HP6NZ5LF   | 5G        | 60W                      | 600mA            | 0 to +70°C     | 0.5Ω      | NZ5     | 0.255 [6.48]            |
| TG5G-HPE6NZ5LF  | 5G        | 60W                      | 600mA            | -40 to +85°C   | 0.5Ω      | NZ5     | 0.255 [6.48]            |
| TG5G-HP10NZ5LF  | 5G        | 90W                      | 1A               | 0 to +70°C     | 0.4Ω      | NZ5     | 0.255 [6.48]            |
| TG5G-HPE10NZ5LF | 5G        | 90W                      | 1A               | -40 to +85°C   | 0.4Ω      | NZ5     | 0.255 [6.48]            |

### Notes:

- <sup>1</sup> Power rating reduced to half when using only two pairs for power as in 802.3af/802.3at applications.
- Please contact the factory or representative for individual datasheets or additional information.
- Footprint interchangeable 10G parts available at <https://www.haloelectronics.com/pdf/discrete-10gbaset.pdf>

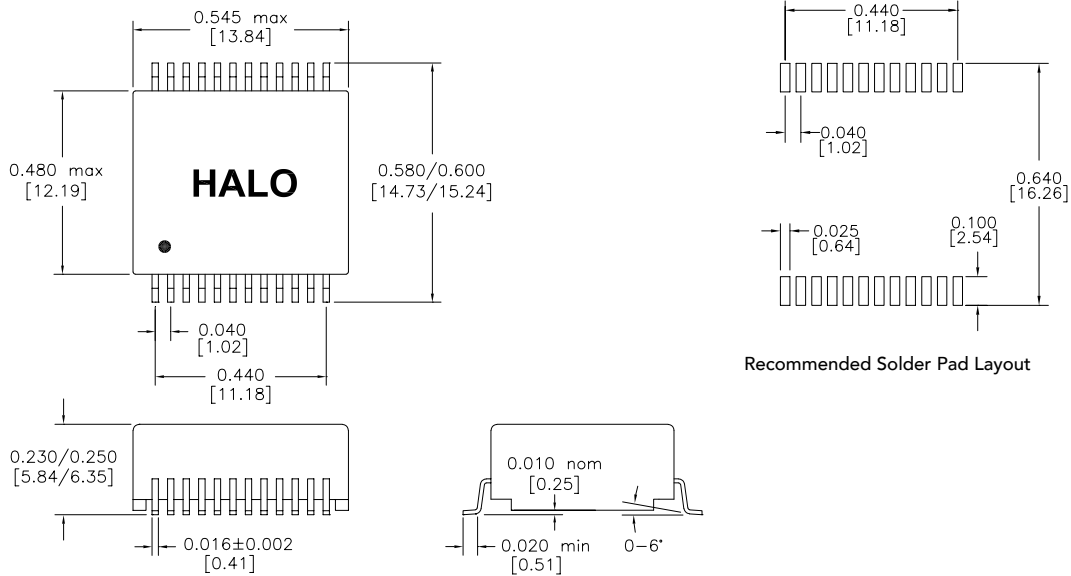
## Circuit Diagram



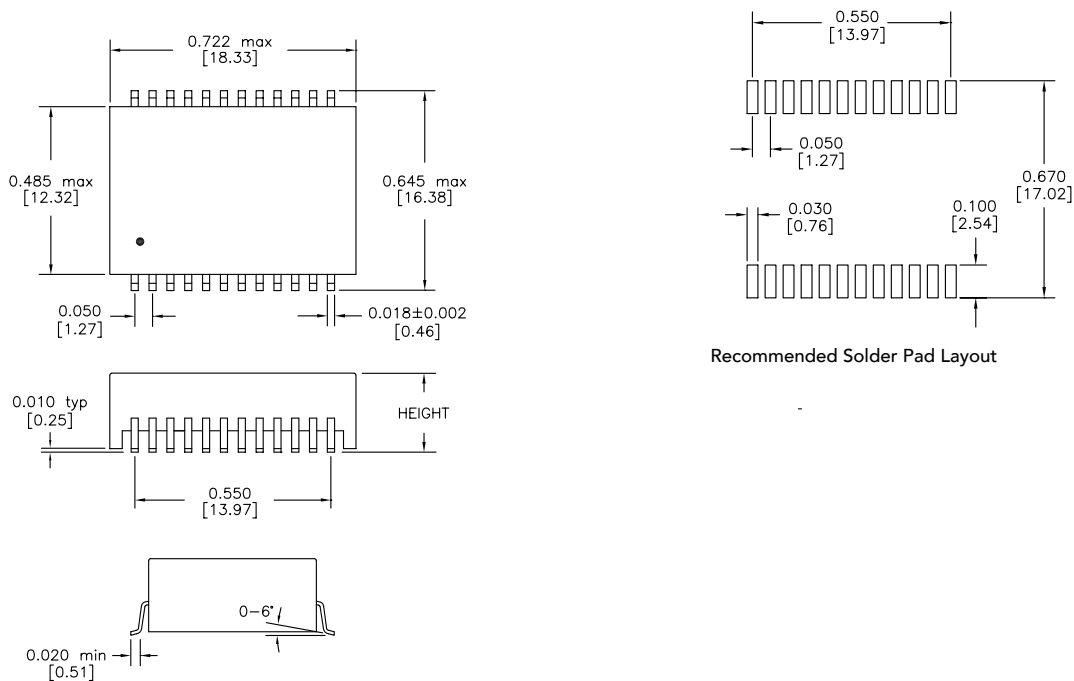
For additional information contact your [local representative](#), or HALO's support staff at (650) 903-3800 or [info@haloelectronics.com](mailto:info@haloelectronics.com)

# HALO 2.5G and 5G Ethernet Transformers

## Mechanical - NJ Package



## Mechanical - NZ & NZ5 Package



**Patented Construction**

US Patent Numbers:

5,656,985 6,297,721 B1

6,297,720 B1 6,320,489 B1

6,344,785 B1 6,662,431 B1

Dimensions: inch [mm]  
Co-Planarity: 0.004 [0.10]



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