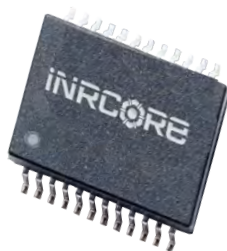


# 10GBASE-T TRANSFORMER MODULES

Ruggedized

10GB-6014



- Compliant with IEEE 802.3 standards
- Dielectric Withstanding Voltage: 1500Vrms
- Operating temperature: -40°C to +125°C
- Storage temperature: -55°C to +125°C
- Terminal finish: Sn/Pb, (Pure tin for RoHS version)
- MSL: 3

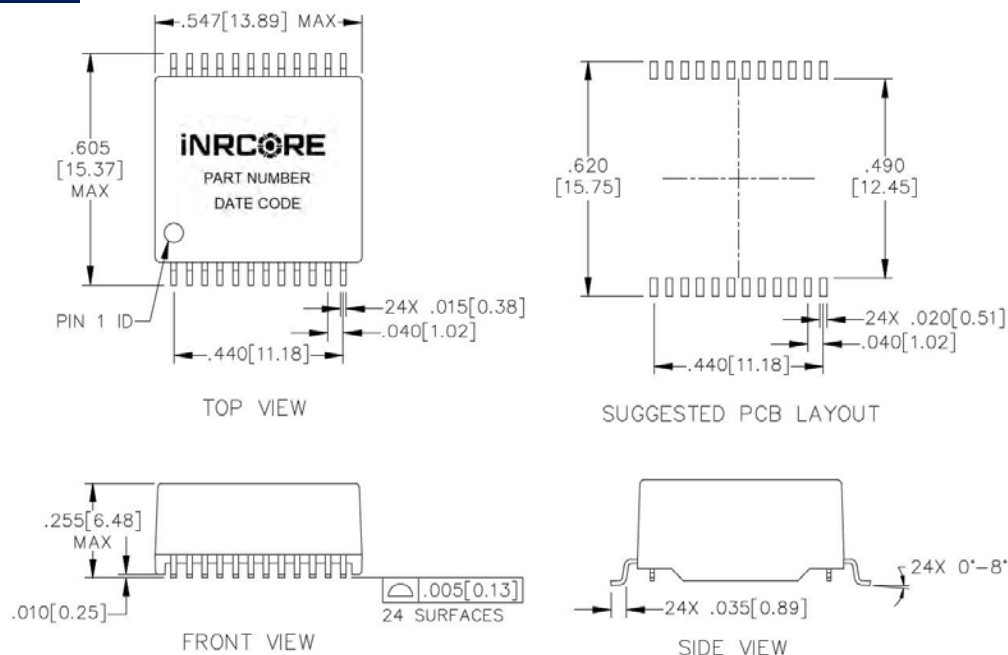
## Electrical Specifications @ 25°C

| Part Number | Insertion Loss (dB Max) |           |             | Return Loss (dB Min) |         |         |         |         | Crosstalk (dB Min) |         |         |         | DM to CM Rejection Ratio (dB Min) |         |         | Dielectric Withstanding Voltage @5s (Vrms MIN) |
|-------------|-------------------------|-----------|-------------|----------------------|---------|---------|---------|---------|--------------------|---------|---------|---------|-----------------------------------|---------|---------|------------------------------------------------|
|             | 100 KHz                 | 1-300 MHz | 400-500 MHz | 1 MHz                | 100 MHz | 300 MHz | 400 MHz | 500 MHz | 1 MHz              | 100 MHz | 400 MHz | 500 MHz | 1 MHz                             | 250 MHz | 500 MHz |                                                |
| 10GB-6014   | -3.0                    | -1.2      | -2.4        | -22                  | -20     | -12     | -10     | -8      | -40                | -37     | -30     | -25     | -40                               | -30     | -22     | 1500                                           |

Notes: 1. Add suffix "T" to part number for Tape & Reel package (i.e.: **10GB-6010T**). 2. Add suffix NL for RoHS compliant part; i.e. (**10GB-6010NL**).

## Mechanical

### 10GB-6014



Dimensions: inches[mm]  
Unless otherwise specified,

Weight.....TBD  
Tube.....TBD

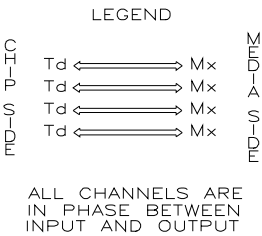
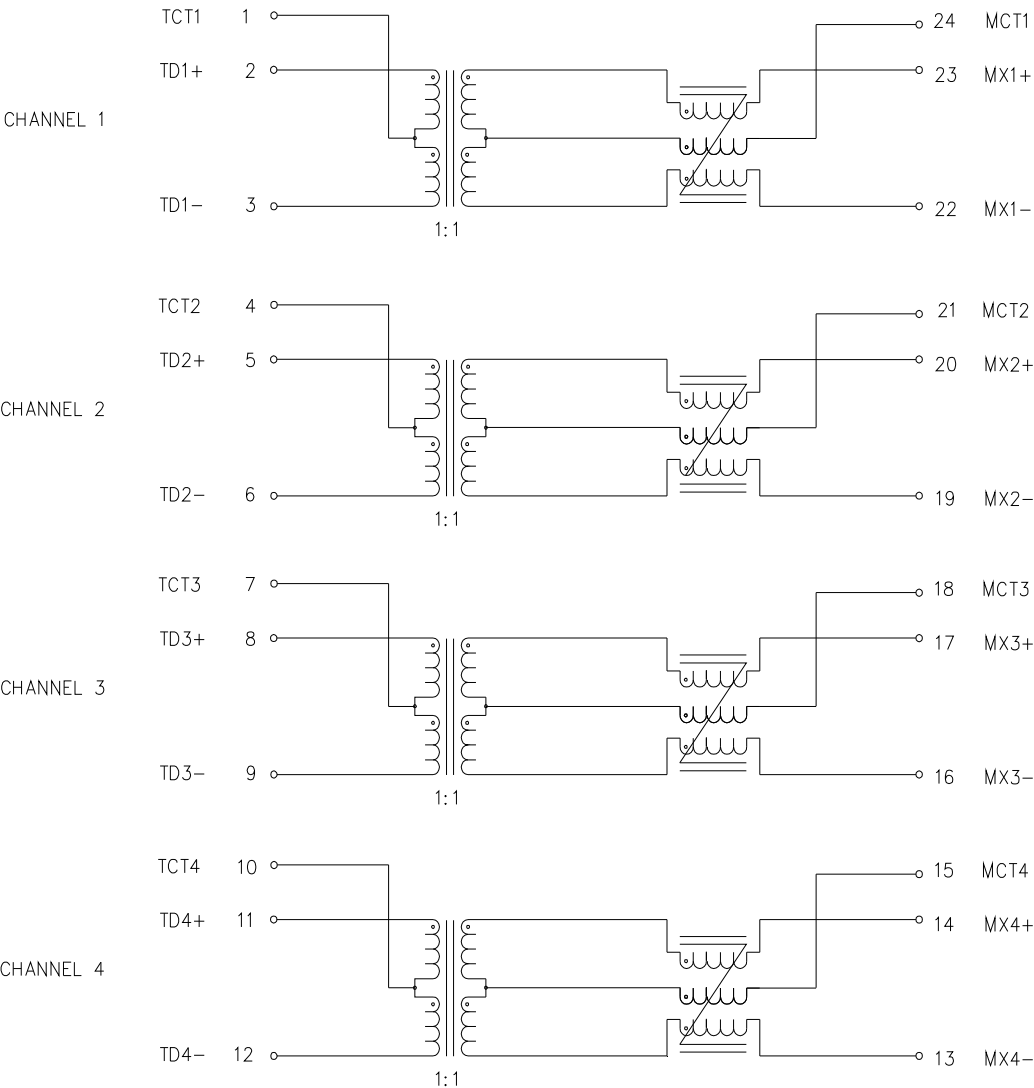


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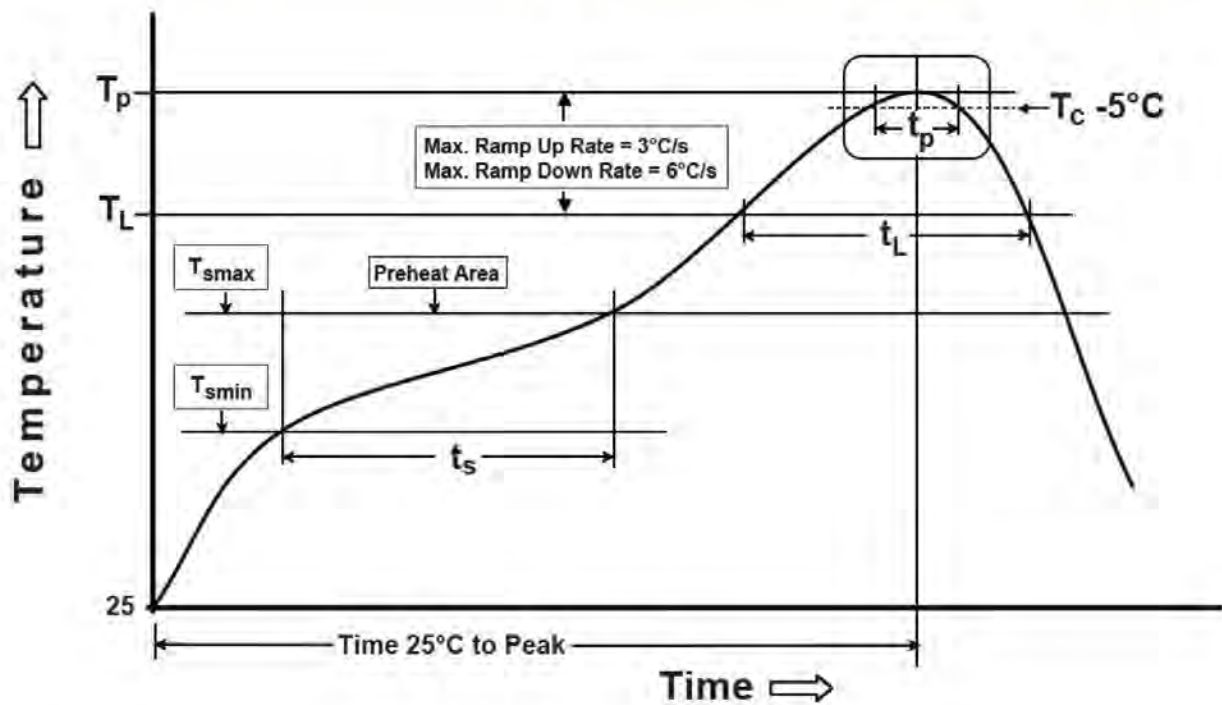
M568 (10/2020)

Schematic

10GB-6014



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



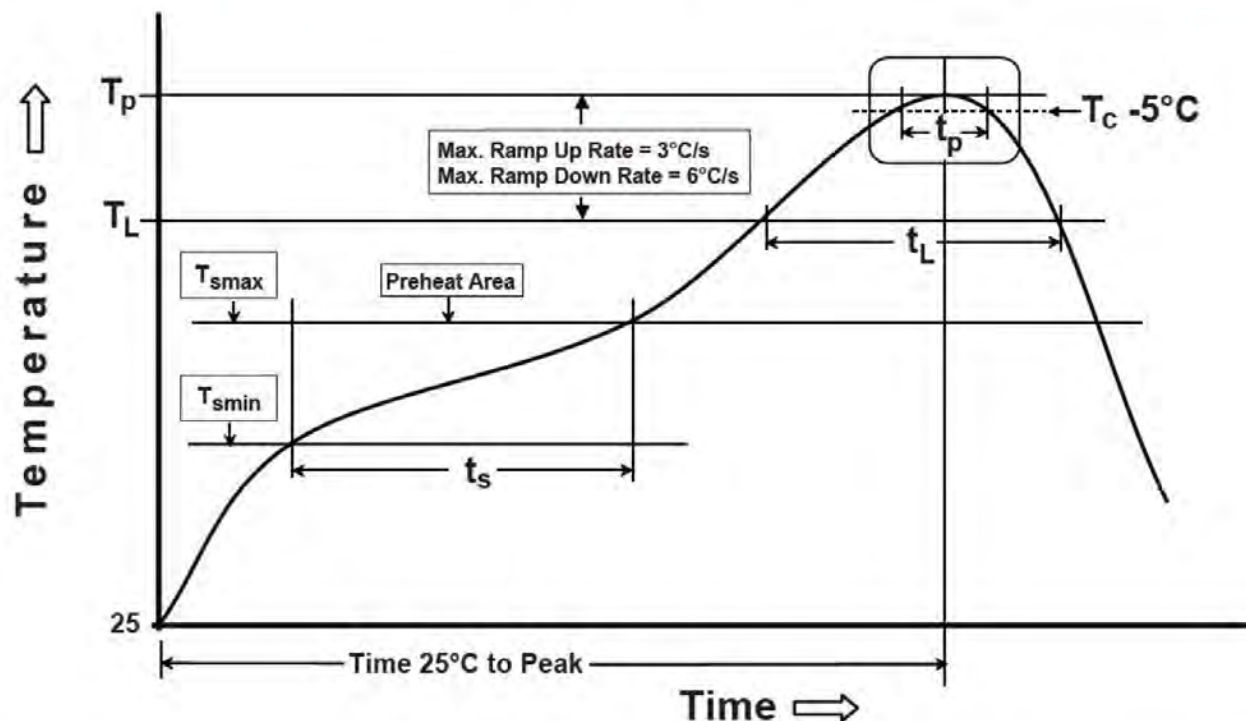
| $T_{SMIN}$<br>(°C) | $T_{SMAX}$<br>(°C) | $T_L$<br>(°C) | $T_P$<br>(°C MAX) | $t_s$<br>(s) | $t_L$<br>(s) | $t_p$<br>(s MAX) | Ramp-up rate<br>( $T_L$ to $T_P$ ) | Ramp-down rate<br>( $T_P$ to $T_L$ ) | Time<br>25°C to peak temperature<br>(s MAX) |
|--------------------|--------------------|---------------|-------------------|--------------|--------------|------------------|------------------------------------|--------------------------------------|---------------------------------------------|
| 100                | 150                | 183           | 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.



## Non-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) |
|--------------------|--------------------|---------------|-------------------|--------------|--------------|------------------|------------------------------------|--------------------------------------|---------------------------------------------|
| 150                | 200                | 217           | 245               | 60-120       | 60-150       | 30               | 3°C/s MAX                          | 6°C/s MAX                            | 480                                         |

### Notes:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2.

### For More Information

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