

# 10/100BASE-TX SINGLE PORT TRANSFORMER MODULES



Ruggedized

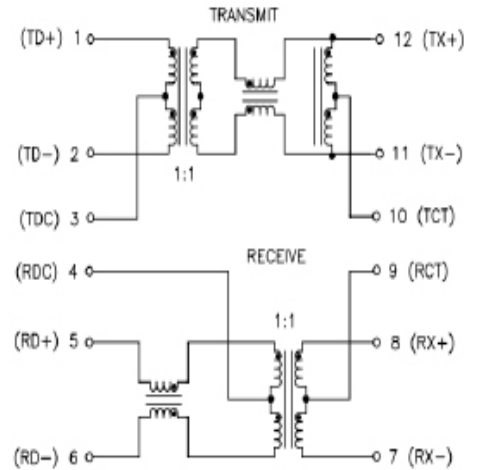
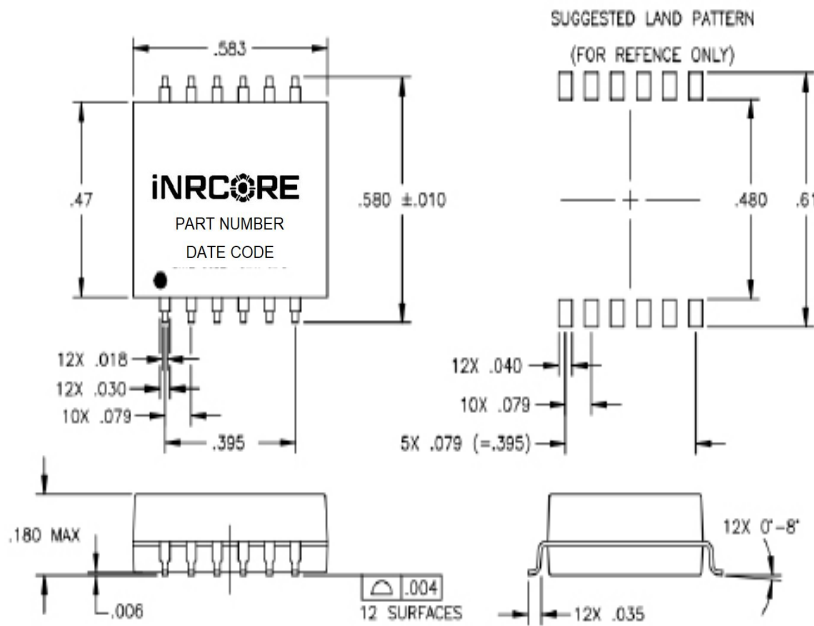
- ⚙️ Compliant with IEEE 802.3u & ANSI X3.263 standards
- ⚙️ 350uH OCL with 8mA DC
- ⚙️ IC grade transfer-molded package withstands 235°C peak temperature profile
- ⚙️ Moisture Sensitivity Level: 3

| Electrical Specifications @ 25 °C – Operating Temperature – 55 °C to +125 °C |                         |                      |          |        |        |                    |        |        |        |  |           |          |
|--|-------------------------|----------------------|----------|--------|--------|--------------------|--------|--------|--------|--|-----------|----------|
| Part Number  | Insertion Loss (dB MAX) | Return Loss (dB MIN) |          |        |        | Crosstalk (dB MIN) |        |        |        | Differential to Common Mode Rejection (dB MIN) |           |          |
|  |                         | 0.1-100MHz           | 2-30 MHz | 50 MHz | 60 MHz | 80 MHz             | 16 MHz | 30 MHz | 60 MHz | 80 MHz   | 0.1-30MHz | 30-60MHz |
| 100B-1018X   | -1.20                   | -18                  | -14      | -12    | -10    | -48                | -44    | -40    | -38    | TX:-45   | TX:-40    | TX:-38   |
|  |                         |                      |          |        |        |                    |        |        |        | RX:-45   | RX:-40    | RX:-33   |

## Mechanical

## Electrical Schematic

100B-1018X



Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
 Unless otherwise specified, all tolerances are:  $\pm \frac{.010}{0,25}$

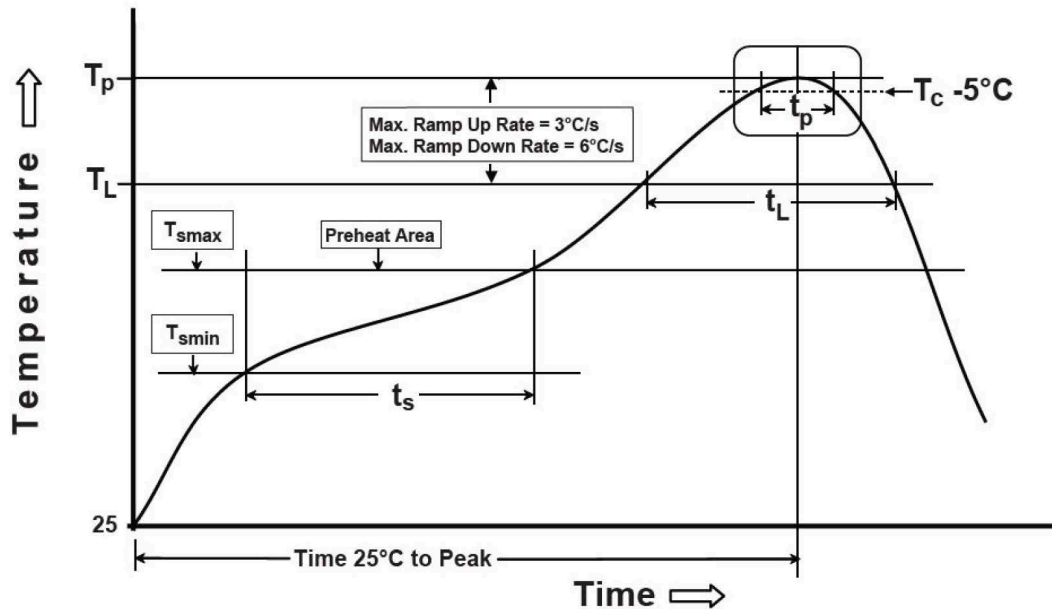


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## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



| $T_{SMIN}$<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.

### For More Information

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