

TX4045B-D3-4.4-20.000-MS

■ **FEATURES:**

- Fully meeting SMC (Sonet Minimum Clock) requirements
- Specifically designed to work with Mitel Semiconductor MT90401 System Synchronizer
- 3.3V power supply for low power consumption applications

■ **APPROVALS**

| RALTRON | CUSTOMER |
|-----------------------|-----------------------|
| Created by, date: | Name (please print): |
| Sales approval, date: | Title (please print): |
| Eng. approval, date: | Signature, date: |

■ **MECHANICAL SPECIFICATION**

HEIGHT, MAX. "H":
0.4" / 10.16 mm

OUTLINE TOLERANCE:
±0.015" / 0.4mm

PIN FUNCTIONS:
[1] NOT CONNECTED
[7] CASE / GROUND
[8] RF OUTPUT
[14] SUPPLY VOLTAGE

NOTE:
DENOTES PIN 1 LOCATION

■ **ELECTRICAL SPECIFICATION**

| PARAMETER | SYMBOL | CONDITIONS | VALUE | UNIT |
|--|--------------------------|--|------------|--------|
| Supply voltage, nom. | Vs | - | +3.3 | V |
| Supply current, max. | Is | Vs, nom. / Ta=+25°C | 20.0 | mA |
| Frequency, nom. | fo | - | 20.000 | MHz |
| Overall frequency stability over 24 hours of operation | $\Delta f/f_0$ | Ta=-40°C to +85°C, Vs=+3.3V±5%, Load=15pF±5% | ±4.4 | ppm |
| Phase noise @ freq.offset | $\mathcal{L}(\Delta f)$ | $\Delta f=1$ Hz | -60 | dBc/Hz |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=10$ Hz | -90 | |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=100$ Hz | -120 | |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=1$ KHz | -130 | |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=10$ KHz | -135 | |
| | $\mathcal{L}(\Delta f)$ | $\Delta f=100$ KHz | -140 | |
| Long term stability | $\Delta f/f_c(\Delta t)$ | $\Delta t=15$ years | ±8.0 | ppm |
| HCMOS output levels | VOH / VOL | load=15pF | 2.7 / 0.33 | V |
| Duty cycle | DC | Load=15pF±5% @ 50%Vs | 40...60 | % |
| Rise- / fall time, max | tr / tf | 10%~90% Vout, 90%~10% Vout | 5.0 | ns |