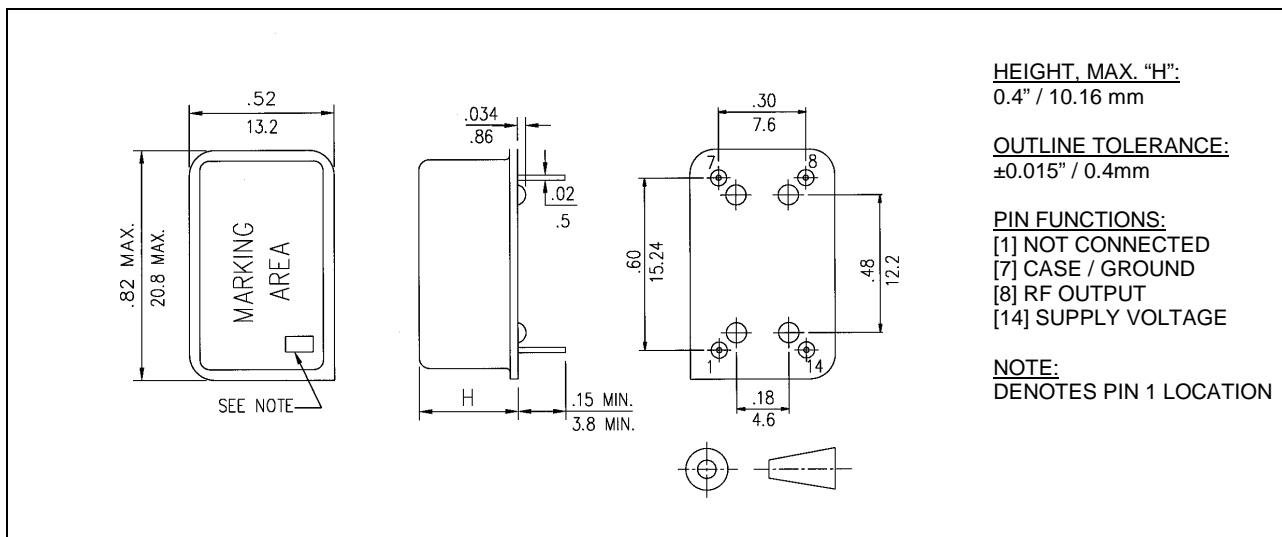


TX4045B-D3-4.4-20.000-MS
FEATURES:

- 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

ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Supply voltage, nom.	V_s	-	+3.3	V
Supply current, max.	I_s	V_s , nom. / $T_a = +25^\circ\text{C}$	20.0	mA
Frequency, nom.	f_o	-	20.000	MHz
Overall frequency stability over 24 hours of operation	$\Delta f_c / f_o$	$T_a = -40^\circ\text{C}$ to $+85^\circ\text{C}$, $V_s = +3.3\text{V} \pm 5\%$, Load = $15\text{pF} \pm 5\%$	± 4.4	ppm
Phase noise @ freq.offset	$\mathcal{E}(\Delta f)$	$\Delta f = 1\text{ Hz}$	-60	dBc/Hz
	$\mathcal{E}(\Delta f)$	$\Delta f = 10\text{ Hz}$	-90	
	$\mathcal{E}(\Delta f)$	$\Delta f = 100\text{ Hz}$	-120	
	$\mathcal{E}(\Delta f)$	$\Delta f = 1\text{ KHz}$	-130	
	$\mathcal{E}(\Delta f)$	$\Delta f = 10\text{ KHz}$	-135	
	$\mathcal{E}(\Delta f)$	$\Delta f = 100\text{ KHz}$	-140	
Long term stability	$\Delta f / f_c(\Delta t)$	$\Delta t = 15\text{ years}$	± 8.0	ppm
HCMOS output levels	V_{OH} / V_{OL}	load = 15pF	$2.7 / 0.33$	V
Duty cycle	DC	Load = $15\text{pF} \pm 5\%$ @ $50\% V_s$	40...60	%
Rise- / fall time, max	t_r / t_f	10%~90% V_{out} , 90%~10% V_{out}	5.0	ns