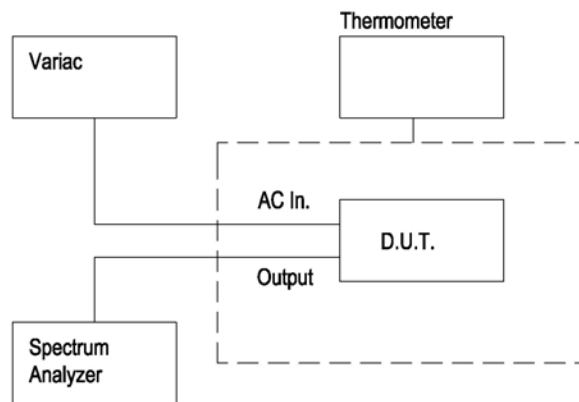


BZ5MXD1V  
Application for FCC Certification  
1 Watt Digital Television Translator

### Frequency Drift versus Temperature

| READINGS     |      |                           |           |           |                    |          |
|--------------|------|---------------------------|-----------|-----------|--------------------|----------|
| CALCULATION  |      |                           |           |           |                    |          |
| TEMP (DEG C) | VAC= | LOCAL OSC'R<br>FREQ (MHZ) |           |           | DEVIATION FROM REF |          |
|              |      | 102                       | 120       | 138       | (Hz)               | (%)      |
| 20 (REF)     |      | 174312212                 | 174312212 | 174312212 | ref                |          |
| -30          |      | 174309250                 | 174309250 | 174309250 | 2962               | 0.001699 |
| -20          |      | 174310200                 | 174310200 | 174310200 | 2012               | 0.001154 |
| -10          |      | 174311075                 | 174311075 | 174311075 | 1137               | 0.000652 |
| 0            |      | 174311575                 | 174311575 | 174311575 | 637                | 0.000365 |
| 10           |      | 174312075                 | 174312075 | 174312075 | 137                | 0.000079 |
| 20           |      | 174312212                 | 174312212 | 174312212 | 0                  | 0.000000 |
| 30           |      | 174312135                 | 174312135 | 174312135 | 77                 | 0.000044 |
| 40           |      | 174312100                 | 174312100 | 174312100 | 112                | 0.000064 |
| 50           |      | 174312275                 | 174312275 | 174312275 | 63                 | 0.000036 |
| 60           |      | 174312550                 | 174312550 | 174312550 | 338                | 0.000194 |



Test Setup for Frequency Stability measurements.

#### Test Equipment List:

Thermostatically controlled Temperature Chamber – Cincinnati Sub-Zero  
HP 8594E Spectrum Analyzer S/N: 3303A00399