



# ELMTBC050H-SN-D

## ELEMENT 50W C-Band BUC

**Input Frequency:** S: 5.850 - 6.425 GHz

**Input Connector:** N-Connector

**Input Voltage + M&C:** 36-60 VDC + No M&C

**Function:** Function



## KEY SPECIFICATIONS

|                         |                      |
|-------------------------|----------------------|
| Band                    | C-Band               |
| External Ref Freq       | 10 MHz, -5 to +5 dBm |
| Input Frequency Band 1  | 950 - 1525 MHz       |
| LO Frequency 1          | 4.9 GHz              |
| Output Frequency Band 1 | 5.850 - 6.425 GHz    |
| Output Power Rated      | 50W                  |
| Reference Type          | Internal Reference   |

## RF SPECIFICATIONS

|                                  |                               |
|----------------------------------|-------------------------------|
| Gain Flatness (over 54mhz)       | 1.5 dB                        |
| Gain Flatness (over Full Band)   | 4 dB                          |
| Gain Flatness (over Temperature) | 4 dB                          |
| Input VSWR                       | 2 : 1 max.                    |
| Linear Gain                      | 73 dB typ.                    |
| Output P1db                      | +47 dBm min. over temperature |
| Output Spurious In Band          | -60 dBc                       |
| Output Spurious Out Of Band      | -50 dBc                       |
| Output VSWR                      | 2 : 1 max.                    |
| Phase Noise 100khz Offset Max    | -95 dBc/Hz                    |
| Phase Noise 10khz Offset Max     | -85 dBc/Hz                    |
| Phase Noise 1khz Offset Max      | -75 dBc/Hz                    |





### ELECTRICAL SPECIFICATIONS

|                     |                |
|---------------------|----------------|
| Current Consumption | 290W DC max.   |
| Power Requirements  | +36 to +60V DC |

### INTERFACE SPECIFICATIONS

|                 |              |
|-----------------|--------------|
| Frequency Sense | Non-inverted |
| IF Connector    | N-Connector  |

### ENVIRONMENTAL SPECIFICATIONS

|                         |              |
|-------------------------|--------------|
| Humidity                | Up to 100%   |
| IP Rating               | IP 54        |
| Temperature Operational | -40 to +55°C |
| Temperature Storage     | -40 to +75°C |

### PHYSICAL SPECIFICATIONS

|                            |   |
|----------------------------|---|
| Internal Function          | Lock detector shuts off Tx in case of LO unlocked |
| Product Dimensions (LxWxH) | 220 x 195 x 138 mm                                |
| Product Weight             | 6.0 kg  |

### LOGISTICS SPECIFICATIONS

| HS Code    | Country of Origin | Ex Works | ECCN Number | Unit Package                   |
|------------|-------------------|----------|-------------|--------------------------------|
| 8543700000 | Made in Korea     | Korea    | EAR99       | 290 x 270 x 250 mm  <br>8.5 kg |

### HOW TO ORDER

## ELMTBC050HT-SF-AE

|                       |                  |                       |                              |   |
|-----------------------|------------------|-----------------------|------------------------------|---|
| <b>ELEMENT SERIES</b> | <b>C: C-Band</b> | <b>POWER 050: 50W</b> | <b>M&amp;C FUNCTION</b>      | <b>BLANK:</b> Opt-out<br><b>E:</b> Ethernet<br><b>M:</b> RS-232 & RS-485  |
|                       | <b>B: BUC</b>    |                       | <b>INPUT VOLTAGE</b>         | <b>A:</b> AC Power Option<br><b>D:</b> DC Power Option  |
|                       |                  |                       | <b>CONNECTOR</b>             | <b>F:</b> 75 Ohm<br><b>N:</b> 50 Ohm  |
|                       |                  |                       | <b>FREQUENCY</b>             | <b>S:</b> 5.850 - 6.425 GHz (Standard)<br><b>P:</b> 6.425 - 6.725 GHz (Palapa)<br><b>I:</b> 6.725 - 7.025 GHz (Insat)<br><b>W:</b> 5.850 - 6.725 GHz (Wide) |
|                       |                  |                       | <b>OPERATING TEMPERATURE</b> | <b>BLANK:</b> -40 to 55°C<br><b>T:</b> -40 to 60°C  |
|                       |                  |                       | <b>REFERENCE</b>             | <b>BLANK:</b> External Reference<br><b>H:</b> Internal Reference  |

### MECHANICAL DIAGRAMS







**Norsat**  
International Inc.

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