

Converters

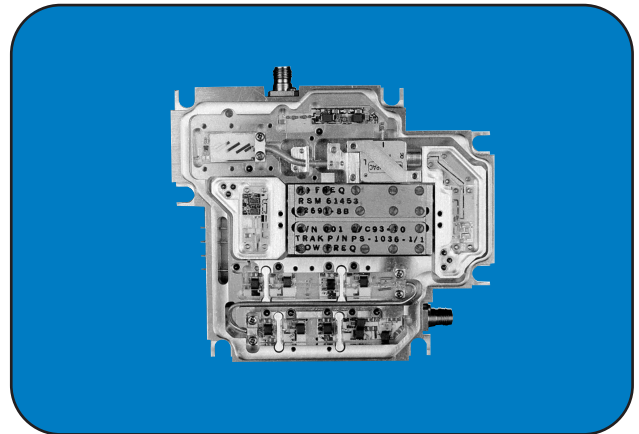
X - Band Down Converter Assembly, 10 GHz

Model: MFC115



Features:

- Combines: Diode Doublers, Comb Multipliers, MMIC Switches, Mixer, Amplifiers and Filters
- Low Residual Noise: - 120 dBc/Hz @ 10 kHz
- Miniature Size: < 3.5 cubic inches
- Low Power Dissipation: 6.75 W
- Low Spurious: - 80 dBc typical



Electrical Specifications

RF Input

| | |
|--------------|------------------|
| Frequency: | 10.1 to 10.3 GHz |
| Power Level: | 0 dBm ± 2 dB |
| Input VSWR: | 2.0:1, maximum |

Reference Input

| | |
|------------------------|------------------|
| Frequency: | 35 MHz |
| Power Level: | + 6 dBm ± 1.5 dB |
| Input VSWR: | 1.7:1, maximum |
| Multiplication Factor: | X288 or X296 |

IF Output

| | |
|-----------------------------------|--------------------|
| Frequency: ^{Note 1} | 20 - 280 MHz |
| Power Level: | + 1.5 dBm ± 3.5 dB |
| Output VSWR: | 2.5:1, nominal |
| Harmonics: | - 25 dBc, typical |
| Spurious: | - 80 dBc, typical |
| Residual Noise: ^{Note 2} | - 120 dBc/Hz |

General

| | |
|--------------------|--------------------------|
| Control Interface: | 1 bit TTL (X288 or X296) |
| DC Power: | + 15 ± 0.4 V @ 450 mA |
| (nominal) | - 5 ± 0.5 V @ 0.10 mA |
| Power Consumption: | 6.75 W, nominal |

Note 1: The IF output has two overlapping, selectable bands providing a multiplication factor of either 288 or 296.

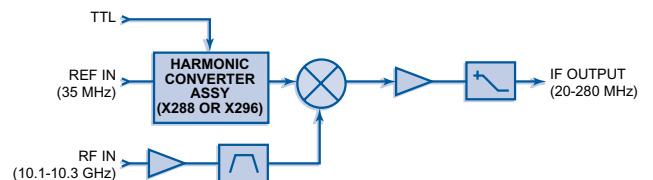
Note 2: Referenced to an offset of 10 kHz

Environmental Specifications

Operating Temperature: - 20 to + 70 °C, baseplate
 Environment: Missile

Mechanical Specifications

Size: (see outline) < 3.5 cubic inches
 Weight: 10 oz (284 g), nominal
 Connectors:
 Ref. Input: SMA (F)
 RF In, IF Out: Feedthru Terminals



Specifications subject to change without notice.