



- Low-power RF load, designed as a termination of isolated circulator ports
- RF absorption via SiC inlay
- Air cooled
- Excellent peak/ average power capability
- High reliability & long life-time
- Free of maintenance & wear parts
- RoHS compliant
- Designed for S-band LINACs operating at 2856 MHz and 2998 MHz

| Parameter | Value |
|----------------------------------|---|
| Footprint Drawing No. | FP-10072607 |
| Product Type | RF Load |
| Configuration | Dry Load |
| Center Frequency f_0 | 2856 MHz or 2998 MHz |
| Bandwidth BW | ± 10 MHz |
| Input Peak Power | 1 MW max. |
| Input Average Power | 50 W max. |
| Return Loss | ≥ 30 dB |
| VSWR | < 1.065 |
| RF Waveguide | WR284 |
| RF Flanges / Connectors | CPR284F, flat, 10 holes $\varnothing 6.5$ mm |
| Cooling System | Air cooled by convection |
| Waveguide Dielectric Filling Gas | SF6 |
| Gas Pressure | nominal: 3 bar absolute |
| | maximum : 4 bar absolute |
| Gas Leak Rate (Helium) | $< 5 \cdot 10^{-4}$ mbar l/s |
| | device pressurized with He gas at 2.5 bar gauge |
| Ambient Temperature | operating : 10°C to 40°C |
| | storage : 0°C to 60°C |
| Relative Humidity | $< 80\%$, non-condensing |
| Body Material | Aluminium |
| Surface Finish | none |

| | |
|-----------------------------|-----------------------|
| Dimensions | see footprint drawing |
| Weight | 1 kg approximately |
| Mounting Orientation | any |

Ordering Code

LD-WR284-01 - Xf

| Variable | Description | Value Options |
|----------|------------------------|---------------|
| Xf | Center Frequency [MHz] | 2856 or 2998 |

Notes:

- Low-Power Acceptance Tests: The following tests will be performed at the AFT factory before shipment: (1) small-signal network analyzer measurements of input return loss vs. frequency at room temperature, (2) He-gas leak rate testing.
- Documentation: An owner's manual is supplied for providing information on the installation, operation and maintenance of the device. The documentation will also include specification, footprint drawing.

As an *option to be ordered separately*, extended documentation is available in terms of a low-power RF test report (viewgraphs S-parameters vs. frequency) or written factory test protocol.

| Rev. | Remark | Date | Name |
|------|---------|------------|---------|
| 00 | Initial | 20.11.2015 | C. Weil |