



- 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:

- 1 Low-Power Factory Tests: The following tests will be performed at the AFT factory before shipment:
 - (1) small-signal network analyzer measurements of return loss vs. frequency at an ambient temperature of 22°C ± 4°C.
 - (2) Water pressure and leak test.
 - (3) Visual inspection.
 - (4) Helium gas leak rate test.

- 2 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, an inspection report, and the RF test results as viewgraphs of S-parameters vs. frequency.

Rev.	Remark	Date	Name
00	Initial	20.11.2015	C. Weil
	New logo, notes updated	19.02.2024	C. Weil