



Specification Sheet
Connector Saver
Model: CS-DIN716-HT
DC – 7500 MHz

Summary

The CS-DIN716-HT is a special high-power variant connector saver, used as a protective or sacrificial connection point to high power amplifiers, antennae, and loads. Through the use of high thermal conductivity materials of maximum allowable cross-section, and by providing center conductor support at temperatures more than double the allowable maximum for typical PTFE-based connectors, this adapter permits the use of mating connectors beyond their normal rating.

For any questions regarding power ratings, inquiries for higher power or other special variants, please contact applications@distributed-elements.com.

Electrical Specifications:

Configuration: DIN 7-16 Male / DIN 7-16 Female

Impedance: 50 ohm in / 50 ohm out

Frequency: DC – 7500 MHz

CW Power @ STP: 1850 W @ 6 GHz, See Table 1

Peak Power @ STP: 42 kW

Insertion Loss: $< 0.02/\sqrt{f_{\text{GHz}}}$ dB

Return Loss: min. > 20 dB, typ. > 30 dB

Electrical length: $270.5^\circ \pm 5.0^\circ$ @ 7.5 GHz



Mechanical and Environmental Specifications:

Maximum Continuous Operating Temperature: -55 to $+155^\circ\text{C}$

Storage Temperature Range: -55 to $+155^\circ\text{C}$

Size: 1.098" reference planes, 1.413 overall x 1-1/4" hex

Weight: 0.27 lb.

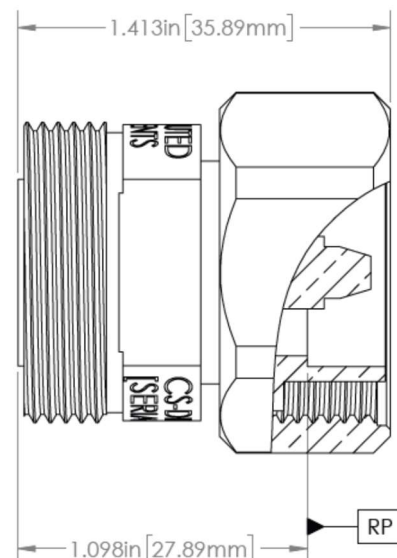
Material Specifications:

Male Contact: 300 μ -in Silver over Phosphor Bronze

Female Contact: 300 μ -in Silver over BeCu

Body and Nut: 100 μ -in Tri-Metal Albaloy over Brass

Dielectric: Proprietary ceramic-filled PTFE



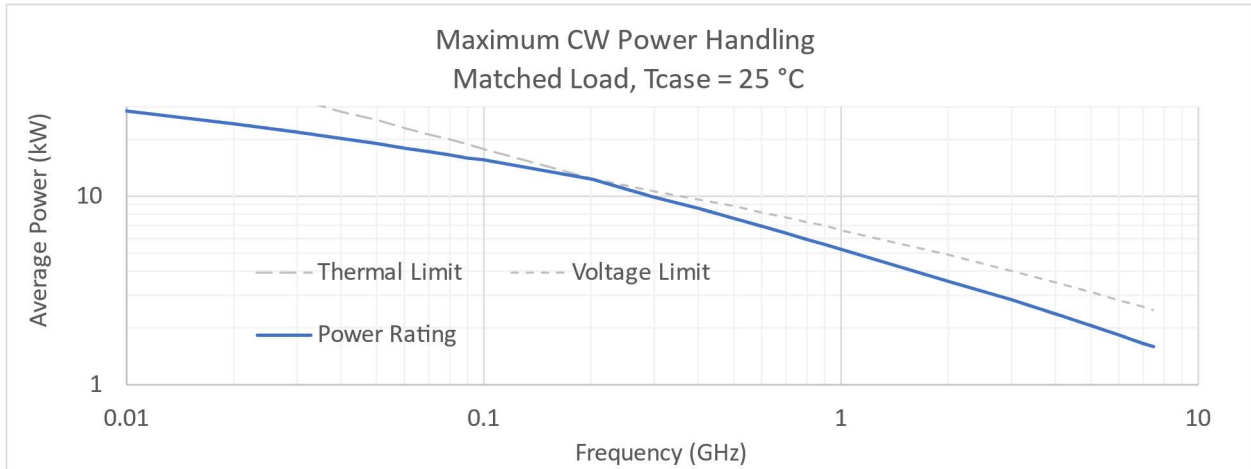


Table 1: Connector Power Rating

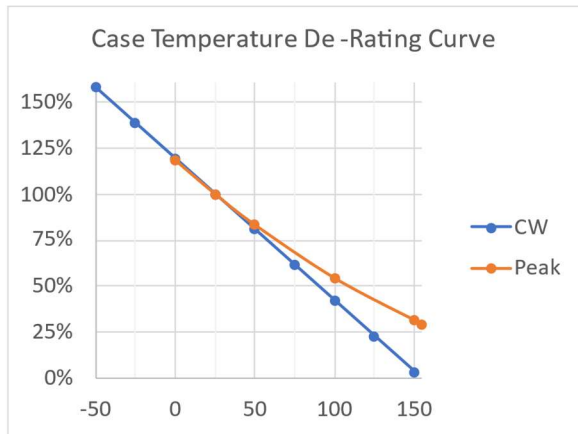


Table 2: Power Derating for Mounting Temp.

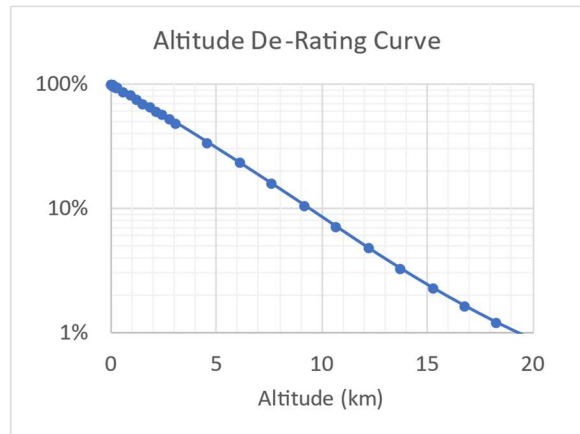


Table 3: Power Derating for Altitude

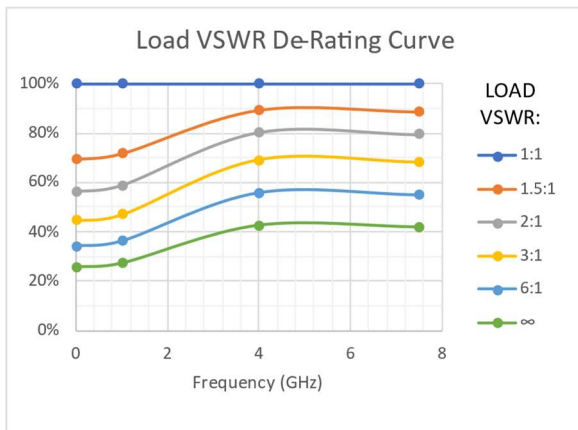


Table 4: Power Derating for Load VSWR

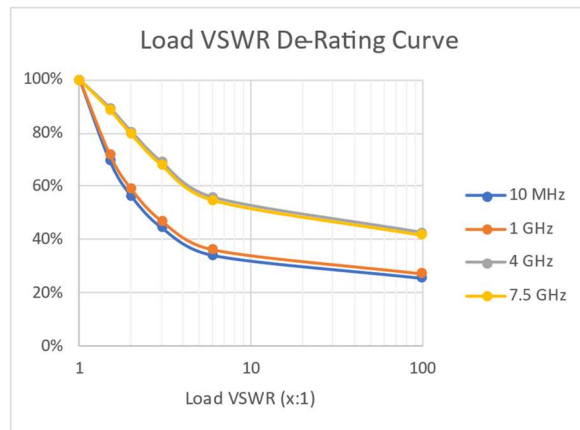


Table 5: Power Derating for Load VSWR (alt.)