



RF OIL FILLED LOADS

IB 009-1

MODEL 5700

1000 WATT

TERMINATING COAXIAL LOAD RESISTOR

*INSTALLATION
OPERATION
MAINTENANCE*



DESCRIPTION: The Model 5700 Coaxial Load Resistor Assembly consists of a special ceramic tube with a fired-on carbon film and a tapered exponential housing, immersed in a special dielectric coolant. The cooling fluid transfers heat from the resistor surface to the case, and the fins on the outside of the case transmit the heat to the surrounding air. The exponential tapered cone has been designed to provide excellent electrical characteristics over the frequency range of DC to 1000 mHz.

DIELECTRIC COMMUNICATIONS 
A UNIT OF GENERAL SIGNAL

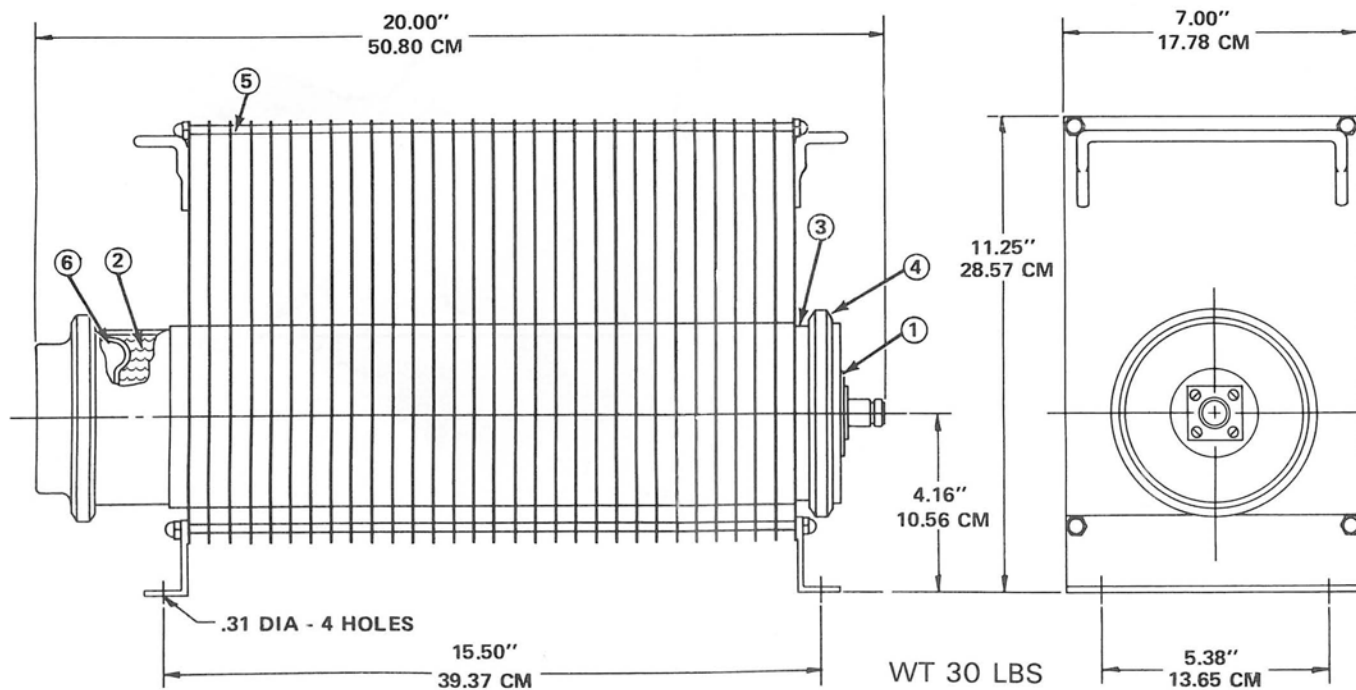
RAYMOND, MAINE 04071 • TEL. 207-655-4555
TWX 710-229-6890 TEL. 800-341-9678

GENERAL: Model 5700 Coaxial Load Resistor Assembly is designed to dissipate 1000 watts of RF power from DC to 1000 mHz. At a characteristic impedance of 50 ohms, the VSWR (voltage standing wave ratio) does not exceed 1.10 to 1. With this low reflection coefficient the load is very useful for tuning transmitters, reject loads on filters, fourth arm terminations on power combiners, etc. Model 5700 can be equipped with quick match connectors in types ranging from type 'N' through 7/8" EIA swivel. Also, coax from 1-5/8" to 3-1/8". (Please specify when ordering).

INSTALLATION: The resistor assembly should be operated in a horizontal position only. Provide a minimum of 8 inches clearance around and above the unit for proper air circulation. Four 9/32" diameter holes on a 5-3/8 x 15-1/2 inch rectangular configuration are provided for base mounting.

MAINTENANCE: Very little maintenance is required. Keep the unit clean and free of dust. If the resistor assembly (1) must be replaced, stand the unit on its back with blocks under it to keep it stable. Loosen and remove the clamp ring (4) which holds the resistor assembly into the case. Carefully lift the resistor assembly straight up and out, allowing the coolant oil to drip back into the case. Inspect the O ring on the resistor housing, and do not reuse unless it is in good condition. Installation of a new resistor assembly is the reverse of the removal procedure. Be certain that the O ring is correctly seated before tightening the clamp. After securing the clamp, place the complete equipment back into a horizontal position and check for oil leakage.

COOLANT: Model 5700 is factory filled to the correct level with 1.0 gallons of DC-200, 50 ctk silicone fluid at room temperature. Watch for possible coolant leakage. Small amounts of leakage will not impair operation, but more than 10% will produce unfavorable effects. If it becomes necessary to add coolant, use only DC-200, 50 ctk silicone, which is obtainable from DIELECTRIC. The electrical characteristics of the coolant are very important with respect to the RF impedance and the power handling capabilities. Coolant expansion is provided for by means of a synthetic expansion seal in the rear of the unit. A breather hole is provided in the end cap. Do not probe inside the end cap through this hole or damage to the seal may result.



REPLACEABLE PARTS for MODEL 5700

PART	CATALOG NUMBER	DESCRIPTION	REQ'D QTY.
1	49765	Resistor Assembly (Specify input connector)	1
2	40334-2	Coolant DC-200, 50 ctk	1.0 Gal.
3	41780-243	O Ring, RF Section Seal	1
4	41748-2	Clamp, Ring	1
5	40980	Radiator Assembly	1
6	29368	Expansion Seal	1