High-Voltage RF Termination
DC-3.5 GHz, 15 kV peak, 100 W CW

P/N: MC-HVCT-7/16F-3.5-15-100-R

Key Features

* Precision-matched termination for 50 Ω RF lines
* High-voltage resistor
* 15 kV peak pulse voltage @ 100 W continuous power
* DC to 3.5 GHz (VSWR < 1.2)
* Return loss > 20 dB
* Modified DIN-7/16 connector for high-voltage
* Passive cooling
* Mechanical dimensions: Ø 75 mm × 555 mm
* Weight ~5 kg

Applications

*High-Power dummy load
*High-voltage RF pulse circuits
*Beam injection/extraction unit
*Particle accelerator systems
*Kicker magnet termination

Electrical Specifications

Parameter	Notes	Value
Frequency range	1, 5	DC to 3.5 GHz
Nominal impedance		50 +/-5 Ohm
VSWR		1.2:1 max.
Return loss		20 dB min.
Peak pulse voltage	2	15 kV max.
Power average	3	100 W (continuous, vertical mounting, 40 °C max ambient)
Peak pulse power	2	4.5 MW max.
Single pulse energy, max.	2, 4	3200 (pulse width ≤ 10 ms)
TM mode frequency, max.		8.9 GHz max.
EM model frequency, max.		3.5 GHz max. (higher modes may increase VSWR)

*Custom options available
This product can be adapted for higher power handling, different mechanical constraints, or specific electrical requirements. Please contact us for tailored versions or OEM solutions designed to meet your application needs.

Notes:
1 limeted by VSWR performance
2 limited by breakdown voltage of coaxial interface
3 continous operation, vertical, backside up, free air, max. 40°C ambient temp.
4 max. 10ms pulse width
5 higher modes can be generated with increased VSWR

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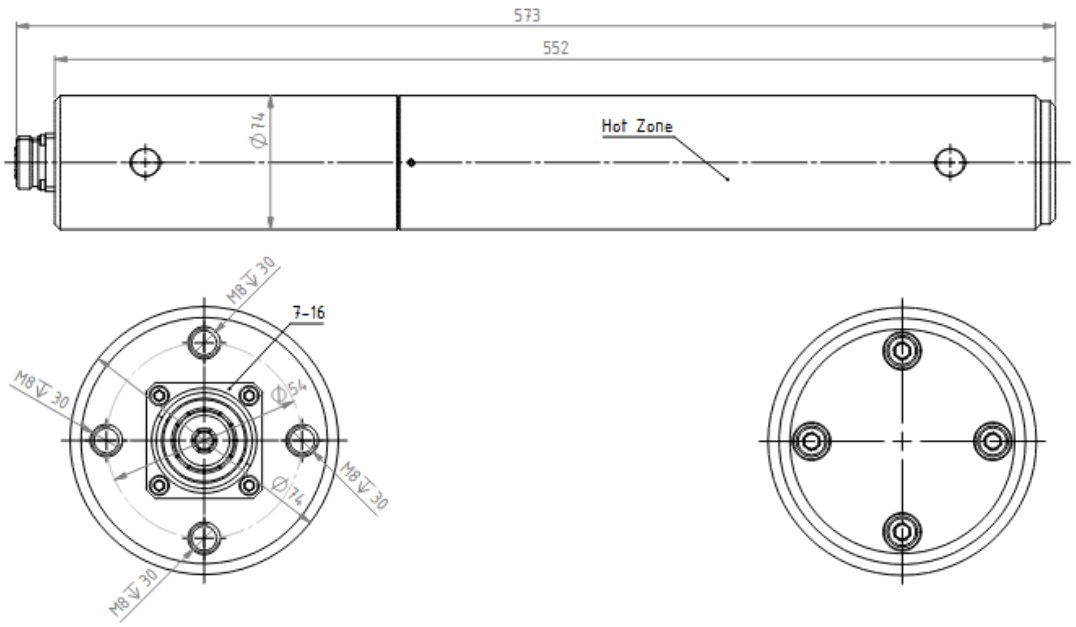
Mechanical Outline



Dimmensions in millimeter

Model Number Selection

MC-HVCT-x1-x2-x3-x4-x5

HVCT	=	High-Voltage Coaxial Termination
x1	=	Connector
x2	=	Frequency Range
x3	=	Voltage (kV)
x4	=	Power CW (Watt)
x5	=	+R (Round)

Notes:

MilliComp reserves the right to change the information presented without prior notice.

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