

MODEL 503FP

Non-Reflective HF Limiter



Features:

- Does not distort incoming signals
- Will not degrade system impedance
- Input low-pass filter rejects out of band signals
- Hermetically sealed Kovar package

The model 503 is a HF Band RF signal limiter intended for front end protection in transmitter co-located environments. The unit also contains an input low-pass filter to reject out of band signals.

Unlike conventional PIN diode based limiters, the model 503 does not distort (clip) the incoming signals nor degrade the system's match (impedance). When in limiting, the 503 proportionately attenuates the incoming signals, preserving the system's linear performance and match. The unit is housed in a hermetic Kovar package.

Electrical Characteristics:

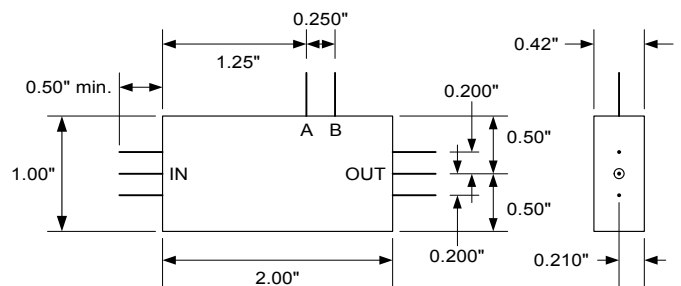
Frequency Range:	0.1 – 32 MHz
Insertion Loss (below threshold):	1.5 dB
Maximum Attenuation (above threshold):	30 dB
Limiting Threshold:	+17 dBm
Transient Time:	5 μ S
Maximum Input Level:	+40 dBm
Inter-modulation Distortion, OIP ³ :	+50 dBm below the threshold, falling to +35 dBm at the threshold and rising to +50 dBm
Impedance:	50 Ω
Return Loss / VSWR:	-14 dB / 1.5:1, below the threshold, improving to -18 dB / 1.3:1 above the threshold

Mechanical Characteristics:

RF Connectors: Pins - See Below

Environmental:

Operating Temperature: -20° to +70° C



0.030" dia. Pins, 8 places

Unmarked pins are ground. Pin A is the +Vcc.
Pin B is the threshold adjust, user select resistors.