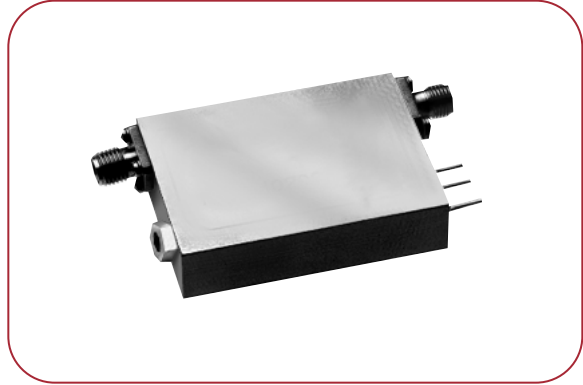


ANALOG PIN ATTENUATORS

FEATURES

- Attenuation range of up to 60 dB
- Up to octave bandwidths
- Voltage control
- Standard field replaceable RF connectors



Frequency Range (GHz)	Model Number	Insertion Loss (dB, Max.)	VSWR* In/Out (Max.)	Amplitude Response** (±dB)	Atten. Range Options (dB, Min.)	Control Options*** (VDC)	Outline
STANDARD, NARROWBAND VOLTAGE-CONTROLLED MODELS							
0.95–1.75	MPAT-00950175-	1.2	1.5:1	See notes	10–60	0–20	174335
1.275–1.48	MPAT-01270148-	2.5	1.5:1	See notes	0–30	0–20	174337
1.5–1.8	MPAT-01500180-	1.1	1.5:1	See notes	10–60	0–20	174336
2.1–2.7	MPAT-02100270-	1.5	1.5:1	See notes	10–60	0–20	174336
2–2.2	MPAT-02000220-	1.7	1.5:1	0.3 in band	0–37	0–6	174336
3.1–3.5	MPAT-03100350-	2.2	1.3:1	0.25 in band	0–15	0–5	Contact MITEQ
3.4–4.2	MPAT-03400420-	2.2	1.5:1	See notes	10–60	0–20	174336
3.8–4.1	MPAT-03800410-	1.3	1.5:1	1 max. at 20–80 dB atten.	10–60	0–5	174336
4.5–4.8	MPAT-04500480-	2.2	1.5:1	See notes	10–60	0–20	174336
5.845–6.43	MPAT-05840643-	2.2	1.5:1	See notes	10–60	0–20	174336
6.4–7.2	MPAT-06400720-	2.2	1.5:1	See notes	10–60	0–20	174336
7.25–7.75	MPAT-07250775-	2.2	1.5:1	See notes	10–60	0–20	174336
7.5–8.5	MPAT-07500850-	1.8	1.5:1	0.25 in band	0–10	0–10	174338
7.9–8.4	MPAT-07900840-	2.2	1.5:1	See notes	10–60	0–20	174336
10.7–12.5	MPAT-10701250-	2.2	1.5:1	See notes	10–60	0–20	174337
10.95–12.75	MPAT-10951275-	2.2	1.5:1	See notes	10–60	0–20	174337
11.7–12.75	MPAT-11701275-	2.2	1.5:1	See notes	10–60	0–20	174337
12.75–13.25	MPAT-12751325-	2.5	1.5:1	See notes	10–60	0–20	174337
13.75–14.5	MPAT-13751450-	2.5	1.5:1	See notes	10–60	0–20	174337
14–14.8	MPAT-14001480-	2.7	1.5:1	See notes	10–60	0–20	174337
17.3–18.1	MPAT-17301810-	3	1.5:1	See notes	10–60	0–20	174338
17.7–20.2	MPAT-17702020-	3	1.5:1	See notes	10–60	0–20	174338

* VSWR performance is specified over full attenuation range.

** Amplitude response: ±0.2 dB over any 40 MHz window, ±1 dB over full band from 0–30 dB attenuation.

*** Insertion loss occurs at 0 V control.

Data presented in this table refers to room temperature.

Custom models featuring broader bandwidths, and/or optimized specifications are also available. Consult MITEQ for options.

ANALOG PIN ATTENUATORS (CONT.)

Frequency Range (GHz)	Model Number	Insertion Loss (dB, Max.)	VSWR* In/Out (Max.)	Amplitude Response** (±dB)	Atten. Range Options (dB, Min.)	Control Options*** (VDC)	Outline
STANDARD, WIDEBAND VOLTAGE-CONTROLLED MODELS							
4-8	MPAT-04000800	2.2	1.7:1	0.3 at 10 dB 1.5 at 40 dB 1.6 at 60 dB	10-60	10-20	174336
8-12	MPAT-08001200-	2.2	1.7:1	0.5 at 10 dB 1.5 at 40 dB 1.6 at 60 dB	10-60	10-20	174337

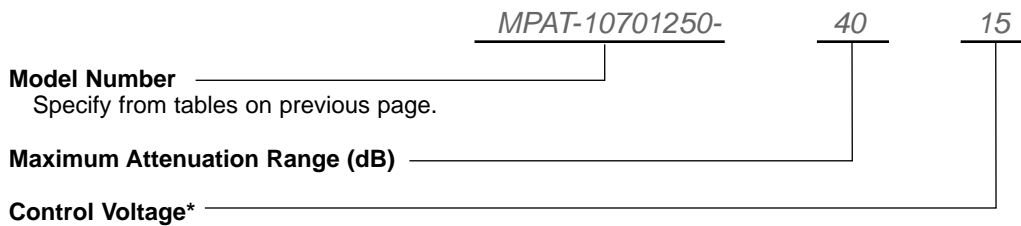
* VSWR is guaranteed over full attenuation range.
 ** Amplitude response: ±0.2 dB over any 40 MHz window, ±1 dB over full band from 0-30 dB attenuation.
 *** Insertion loss occurs at 0 V control.
 Data presented in this table refers to room temperature.
 Custom models featuring broader bandwidths, and/or optimized specifications are also available. Consult MITEQ for options.

ENVIRONMENTAL CONDITIONS

Operating temperature .. 0 to 70°C
 Storage temperature -40 to +85°C
 Humidity 95%, noncondensing
 Vibration 12 g's rms, 20-2000 Hz Per
 MIL-STD-810B Method 514, Procedure 5

ORDERING INFORMATION

To order a standard analog attenuator with specific parameters, please include the following:



* Control voltage is specified at the maximum attenuation of the device. In the example above, maximum attenuation of 40 dB is achieved at 15 V.

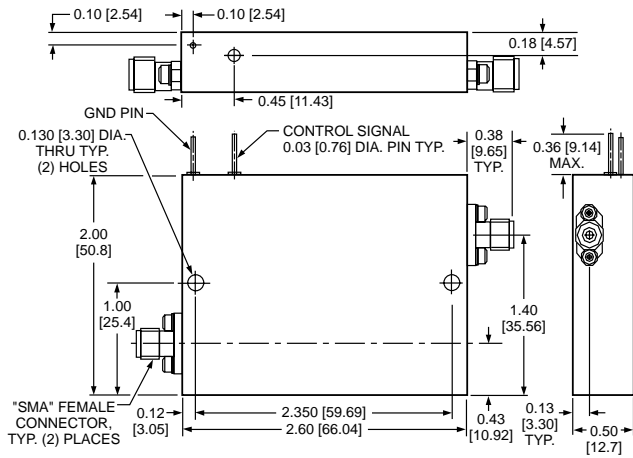
ORDERING INFORMATION FOR RF CONNECTORS

Unless otherwise specified, all units will be shipped with field replaceable SMA female connectors on the input and outputs. If male connectors are desired on any port, please specify on the purchase order.

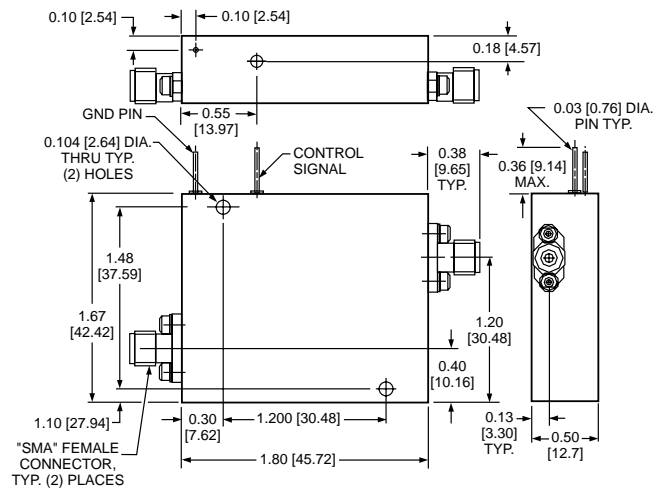


ANALOG PIN ATTENUATORS OUTLINE DRAWINGS

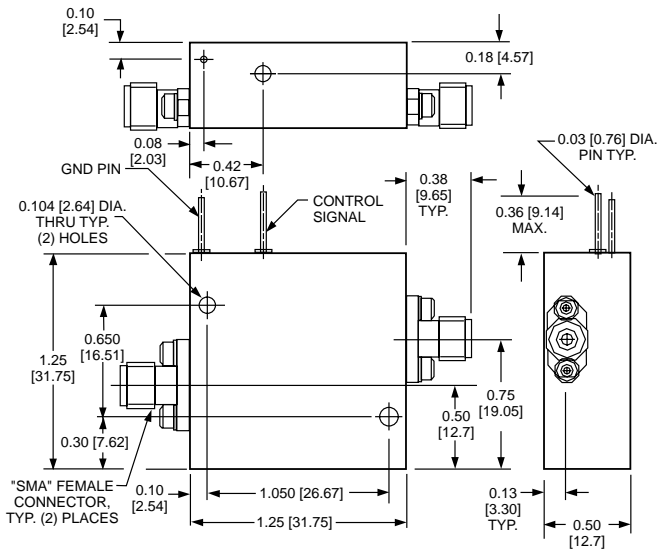
174335



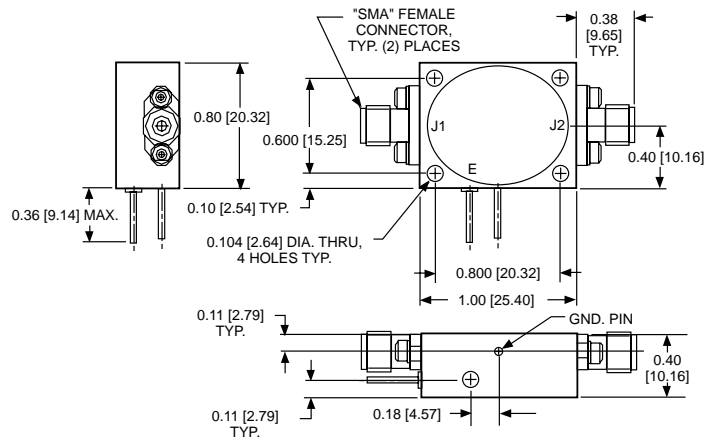
174336



174337



174338



GENERAL NOTES:

1. Dimensions shown in brackets [] are in millimeters.
2. Unless specified, all connectors are type SMA female field replaceable.
3. Tolerance as follows:
 - .xx = ±0.01 [.xx = ±0.25]
 - .xxx = ±0.005 [.xxx = ±0.13]