

FEATURES

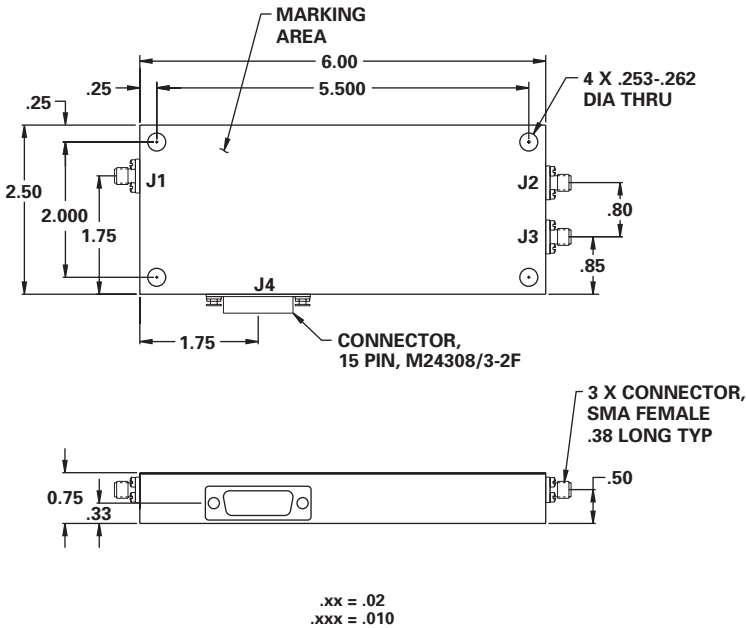
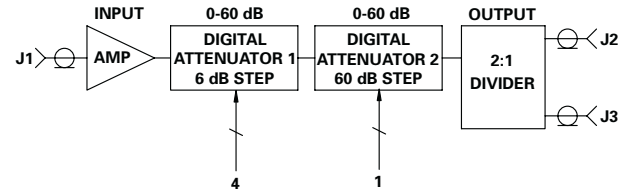
- 420 - 450 MHz
- Gain +7.5 dB
- Attenuation 120 dB
- LSB, 6 dB
- Phase Tracking ±3 dB
- 3° Max Phase Tracking



**MODEL NO.
100D9104**

Amp Attenuator Divider

MFD



J4

| PIN NUMBER | BOARD NUMBER | FUNCTION |
|------------|--------------|---------------|
| 1 | 1 | BIT 1 (+) |
| 2 | 2 | BIT 1 (-) |
| 3 | 3 | BIT 2 (+) |
| 4 | 4 | BIT 2 (-) |
| 5 | 5 | BIT 3 (+) |
| 6 | 6 | BIT 3 (-) |
| 7 | 7 | BIT 4 (+) |
| 8 | 8 | BIT 4 (-) |
| 9 | 9 | BIT 5 (+) |
| 10 | 10 | BIT 5 (-) |
| 11 | - | NO CONNECTION |
| 12 | E1 | GND |
| 13 | E2 | GND |
| 14 | 11 | +15V |
| 15 | 12 | +15V |

JUMPER PINS 14 & 15

TABLE I CONTROL LOGIC

| LOGIC | BIT 1 6dB | | BIT 2 12dB | | BIT 3 24dB | | BIT 4 48dB | | BIT 5 60dB | | SETTING | |
|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|---------|-----------|
| | J4 PIN 1 (+) LO | J4 PIN 2 (-) HI | J4 PIN 3 (+) LO | J4 PIN 4 (-) HI | J4 PIN 5 (+) LO | J4 PIN 6 (-) HI | J4 PIN 7 (+) LO | J4 PIN 8 (-) HI | J4 PIN 9 (+) LO | J4 PIN 10 (-) HI | | |
| 0 | LO | HI | 0 | LO | HI | 0 | LO | HI | 0 | LO | HI | THRU |
| 1 | HI | LO | 0 | LO | HI | 0 | LO | HI | 0 | LO | HI | 6dB |
| 0 | LO | HI | 1 | HI | LO | 0 | LO | HI | 0 | LO | HI | 12dB |
| 1 | HI | LO | 1 | HI | LO | 0 | LO | HI | 0 | LO | HI | 18dB |
| 0 | LO | HI | 0 | LO | HI | 1 | HI | LO | 0 | LO | HI | 24dB |
| 1 | HI | LO | 0 | LO | HI | 1 | HI | LO | 0 | LO | HI | 30dB |
| 0 | LO | HI | 1 | HI | LO | 1 | HI | LO | 0 | LO | HI | 36dB |
| 1 | HI | LO | 1 | HI | LO | 1 | HI | LO | 0 | LO | HI | 42dB |
| 0 | LO | HI | 0 | LO | HI | 0 | LO | HI | 1 | HI | LO | 48dB |
| 1 | HI | LO | 0 | LO | HI | 0 | LO | HI | 1 | HI | LO | 54dB |
| 0 | LO | HI | 1 | HI | LO | 0 | LO | HI | 1 | HI | LO | 60dB |
| 0 | LO | HI | 0 | LO | HI | 0 | LO | HI | 1 | HI | LO | 60dB |
| 0 | LO | HI | 1 | HI | LO | 0 | LO | HI | 1 | HI | LO | 120dB |
| 1 | HI | LO | 1 | HI | LO | 1 | HI | LO | 1 | HI | LO | 120dB MIN |

LOGIC "1"= (+) INPUT HIGH, (-) INPUT LOW = ACTIVE HIGH
 LOGIC "0"= (+) INPUT LOW, (-) INPUT HIGH = ACTIVE LOW

GUARANTEED PERFORMANCE

| Parameter | Min | Typ | Max | Units | Conditions |
|------------------------------|-----------|-------|-------|-------|---------------------------|
| Operating Frequency | 420 | | 450 | MHz | |
| DC Current | | .5 | .75 | mA | At +15 VDC Supply |
| Control Type | | | | | |
| Control Current | High | | | µA | VIH = +2.7 V |
| | Low | | | µA | VIL = +0.5 V |
| Insertion Gain | +7 | 7.5 | +8 | dB | Excluding 3 dB |
| Isolation | 80 | | | dB | Between each Combiner |
| | 20 | | | dB | Output / Output |
| VSWR | | 1.2/1 | 1.3/1 | | |
| Impedance | | 50 | | OHMS | |
| Switching Speed | | | 1 | µSec | 50% TTL to 90% / 10% RF |
| Transition (Rise/Fall) Time | | | | nSec | 90% / 10% or 10% / 90% RF |
| Switching (Video) Transients | | | | V | Peak Value |
| Intercept Points | | | | dBm | |
| | 2nd | | | dBm | |
| | 3rd | | | dBm | |
| RF Power | Operate | +18 | | dBm | |
| | No Damage | +20 | | dBm | |
| Operating Temperature | | | | °C | TA |