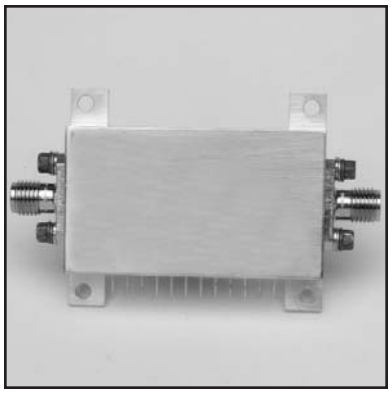


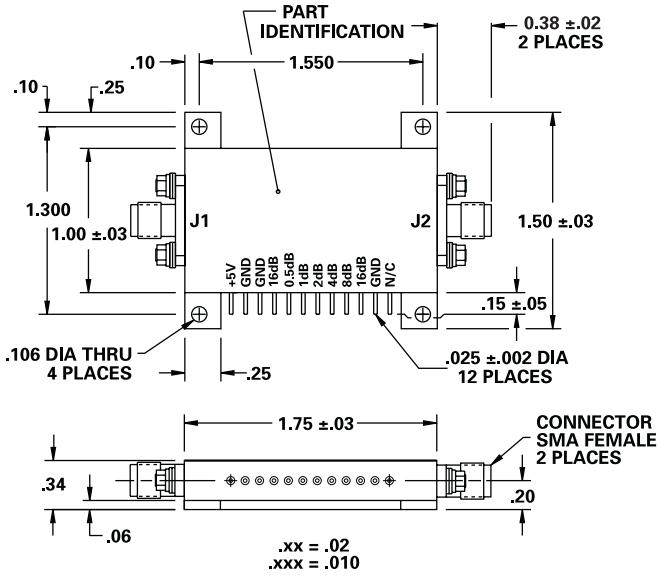
**MODEL NUMBER**
**DAT76191**

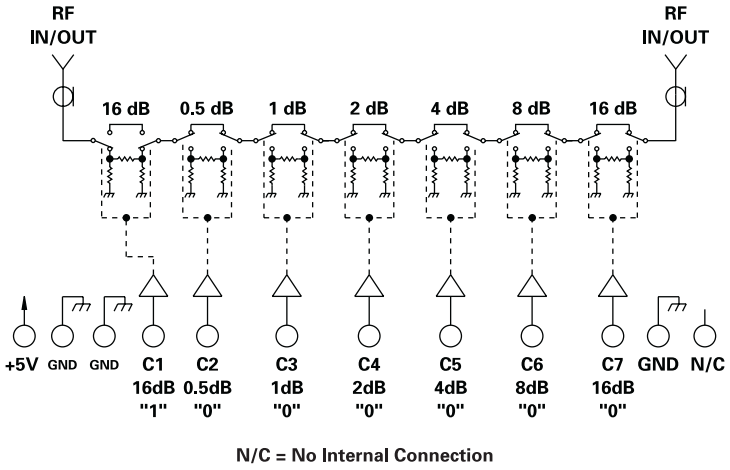
# PIN Diode 7 Section Attenuator

## FEATURES

- 2200-2800 MHz
- 0.5 dB LSB, 47.5 dB Range
- 3.2 dB Insertion Loss
- TTL Control
- Replaceable SMA Connectors

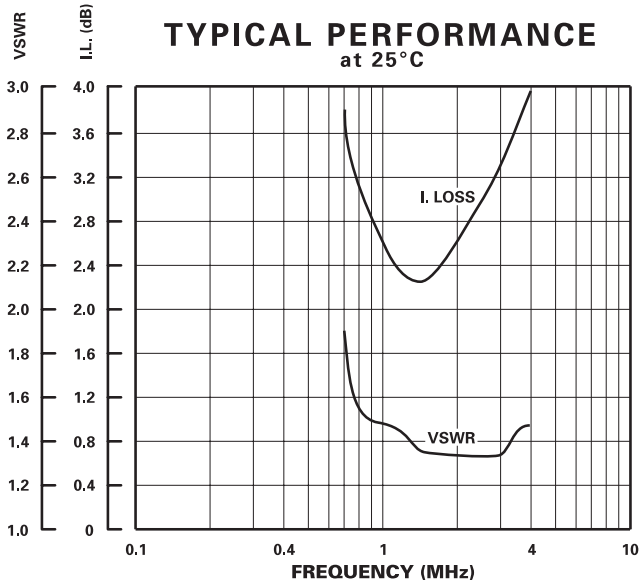
**7 BIT**




N/C = No Internal Connection

## TYPICAL PERFORMANCE
at 25°C




## GUARANTEED PERFORMANCE

| Parameter | | Min | Typ | Max | Units | Conditions |
|---|---|---|---|---|---|---|
| Operating Frequency | | 2200 | | 2800 | MHz | |
| DC Current | | | 96 | 120 | mA | At +5 VDC Supply |
| Control Type | | | TTL | | | 7 Line<br>Logic "0" = Thru<br>Logic "1" = Attenuation |
| Control Current | *High* | | | | µA | VIH = +2.7 V |
| | *Low* | | | | µA | VIL = +0.5 V |
| Insertion Loss | | | 3.6 | 4.0 | dB | at 25° C Worst Case |
| Attenuation | *LSB* | | 0.5 | | dB | |
| | *Range* | 0 | | 47.5 | dB | 0.5, 1, 2, 4, 8, 16, 16 |
| | *Accuracy* | | | ±0.5 | dB | 1 to 15.5 dB Attenuation |
| | | | | ±1.0 | dB | 16 to 31.5 dB Attenuation |
| | | | | ±1.5 | dB | 32 to 47.5 dB Attenuation |
| | *Flatness* | | | ±0.25 | dB | 0.5 to 15.0 dB |
| | | | | ±0.4 | dB | 15.5 to 30.5 dB |
| | | | | ±0.6 | dB | 31.0 to 47.5 dB |
| VSWR | | | | 1.6/1 | | |
| Impedance | | | 50 | | OHMS | |
| Switching Speed | | | 65 | 100 | nSec | 50% TTL to 90% / 10% RF |
| Transition (Rise/Fall) Time | | | 40 | | nSec | 90% / 10% or 10% / 90% RF |
| Switching (Video) Transients | | | 450 | | mV | Peak Value |
| Intercept Points | *3rd* | +45 | | | dBm | At Insertion Loss State |
| RF Power | *Operate* | | +20 | | dBm | 0.1 dB Compression |
| | *No Damage* | | | +25 | dBm | |
| Operating Temperature | | 0 | +25 | +75 | °C | TA |