

THICK FILM 6 BIT RESOLUTION ATTENUATORS, DIGITAL HIGH PRECISION

DAP SERIES**50-500 MHz**

T-74-09-01

GENERAL INFORMATION: The DAP06XXX and DAP16XXX Series of Digital Attenuators are high precision 6 bit devices that are designed for maximum accuracy over frequency and temperature. By tightly controlling these parameters within the thick film circuit the ultimate stability of these devices are enhanced.

The entire circuit, including the custom designed drivers, is built on the same alumina substrate thus assuring high reliability along with matched thermal characteristics.

FEATURES:

- Thick Film Construction
- Monotonic Response
- Internal TTL Drivers
- Plug-In Package with Mounting Plate
- Hermetically Sealed Per MIL-STD-883
- Low Switching Transients

GENERAL SPECIFICATIONS:

FREQUENCY RANGE: 50 to 500 MHz (in bandwidths of $\pm 10\%$)

RF IMPEDANCE: 50 Ohms

DC POWER: +5 Volts ± 0.5 Volts at 175 ma max.

LOGIC: T²L Compatible

DRIVER: Integrated on RF Substrate

ATTENUATION RANGE: To 63 dB

SWITCHING TRANSIENTS: 250 mV max.

RF POWER: +10dBm Operating
+20dBm Survivability

ACCURACY: ± 0.25 dB or $\pm 1\%$ whichever is greater over frequency and temperature ranges.

MATCHING: To ± 0.2 dB (Optional when requested)

VSWR: 1.5:1 max.

SPEED: 350 nsec. max.; 250 nsec typ. $150 \leq \text{freq.} \leq 500$

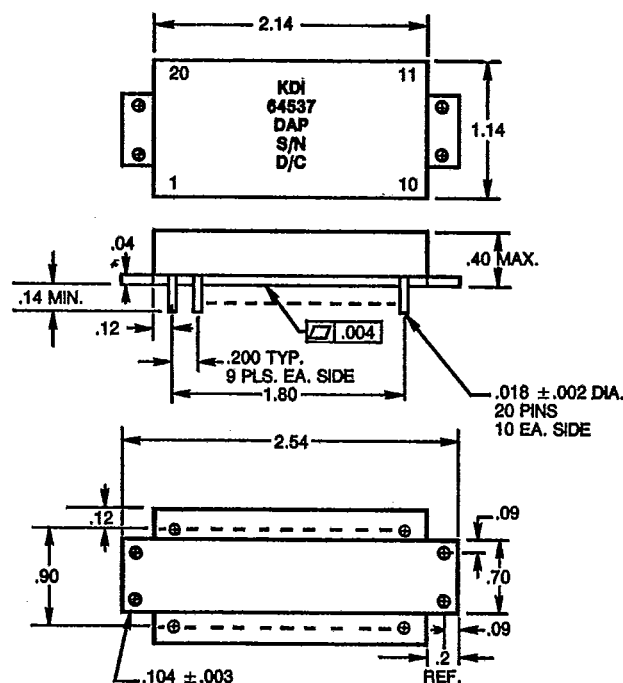
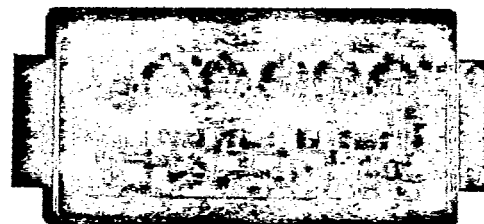
1.0 μ sec max.; 750 nsec typ. $50 \leq \text{freq.} \leq 150$

INSERTION LOSS: 4 dB max.

3rd ORDER INTERCEPT: +30 dBm typ.

OPERATING TEMPERATURE: -55°C. To +85°C.

STORAGE TEMPERATURE: -55°C. To +125°C.



MODEL #	LSB	MSB
DAP06XXX	0.5 dB	16 dB
DAP16XXX	1.0 dB	32 dB

NOTE 1. When ordering be sure to specify the center frequency. XXX denotes the center frequency in MHz (DAP06350 has a center frequency of 350 MHz)

NOTE 2. Other attenuators are available on request

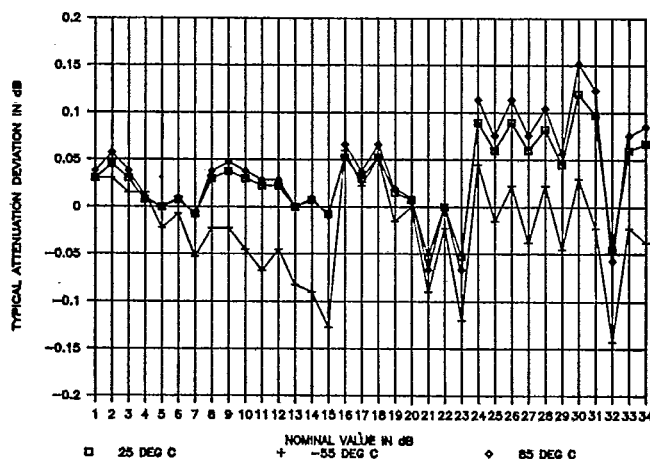
NOTE 3. Consult factory for phase and attenuation matching for pairs of units.

NOTE 4. Screening to MIL-STD-883 available

PIN ASSIGNMENTS

Part. No.	1	10	11	13	14	15	16	17	18	19
DAP06XXX	RF	RF	N/C	16 dB	1 dB	0.5 dB	8 dB	4 dB	2 dB	+5V
DAP16XXX	RF	RF	N/C	32 dB	16 dB	1 dB	8 dB	4 dB	2 dB	+5V

NOTES: ALL OTHER PINS GROUNDED
LOGIC 1 = BIT ENABLED

ATTENUATION VS TEMPERATURE

**KDI/triangle
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