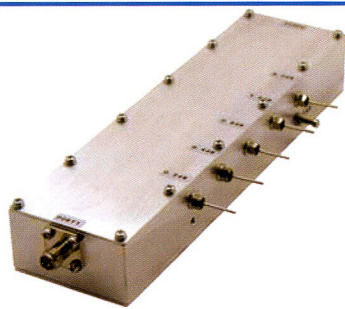


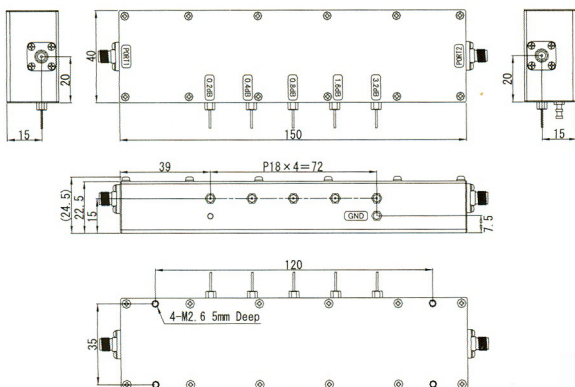
# MECHANICAL STEP ATTENUATOR

**HD29966-OS/3.3V**  
**HD29966-OS/5.0V**



## OUTLINE DRAWING

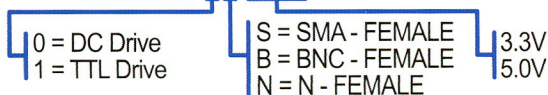
※IN MILLIMETERS



## HOW TO ORDER

Model Name

**HD29966-OS/3.3V**



※BNC Operational to 1GHz

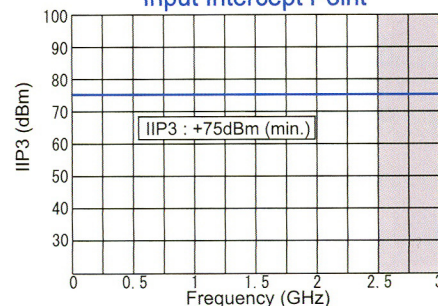
## TYPICAL PERFORMANCE

- Broadband Frequency : DC ~ 2500MHz
- Attenuation : 0.2dB Step/5Bit/6.2dB
- Input Intercept Point : +75.0dBm (min.)
- +3.3V (LVTTTL) / +5.0V (TTL) Operation
- RoHS Compliance

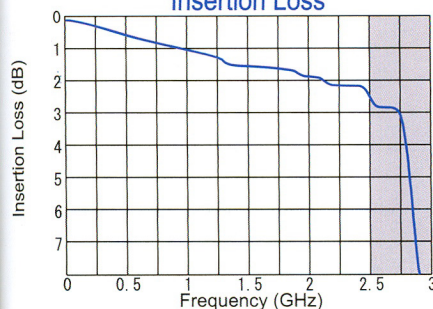
## SPECIFICATIONS

Frequency Range	: DC ~ 2500MHz
Insertion Loss (DC-1.5GHz)	: 2.0dB (max.)
(1.5GHz-2.5GHz)	: 3.5dB (max.)
Attenuation Range / Steps	: 6.2dB / 0.2, 0.4, 0.8, 1.6, 3.2dB
Attenuation Accuracy (DC-1.5GHz)	: ±0.2dB (max.)
(1.5GHz-2.5GHz)	: ±0.4dB (max.)
Impedance	: 50Ω
Input / Output VSWR	: 1.5 : 1 (typ.)
Logic Input (DC Drive/Standard)	: +3.3V = Att Setting / 0V = Zero Setting
(DC Drive/Option)	: +5.0V = Att Setting / 0V = Zero Setting
(TTL Drive/Option)	: High = Att Setting / Low = Zero Setting
Switching Speed	: 5ms (max.) tRise / tFall
DC Supply Input (Standard)	: +3.3V±0.5V 120mA (max.) / Step
DC Supply Input (Option)	: +5.0V±0.5V 100mA (max.) / Step
Input Intercept Point	: +75.0dBm (min.)
Maximum RF Input Power	: +24.0dBm (avg.)
Operating Temperature	: -20°C to +60°C
Storage Temperature	: -20°C to +80°C
Connectors (Standard)	: SMA-FEMALE
Connectors (Option)	: BNC-FEMALE : N-FEMALE
Weight (Standard)	: 250g (9oz) (typ.)

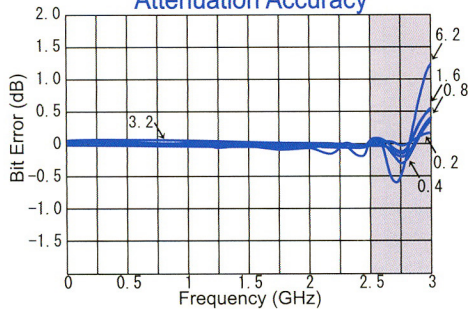
### Input Intercept Point



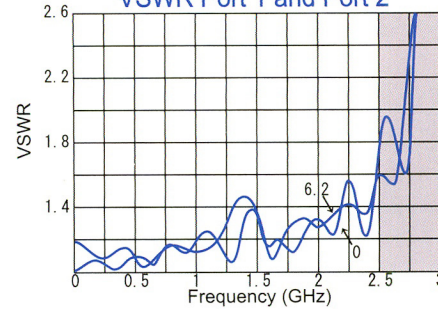
### Insertion Loss



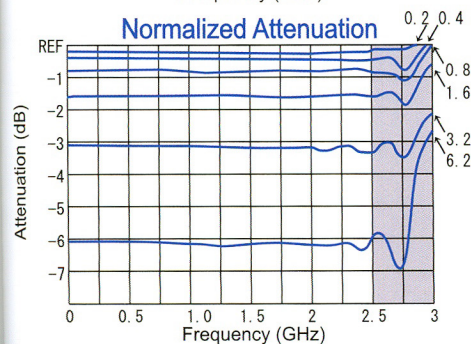
### Attenuation Accuracy



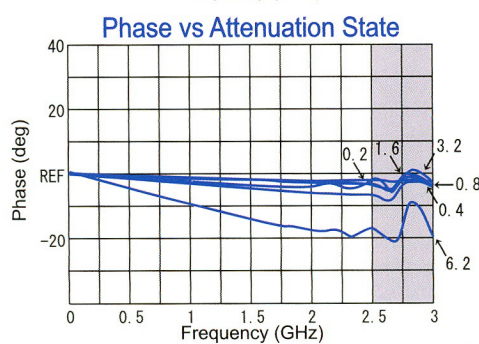
### VSWR Port 1 and Port 2



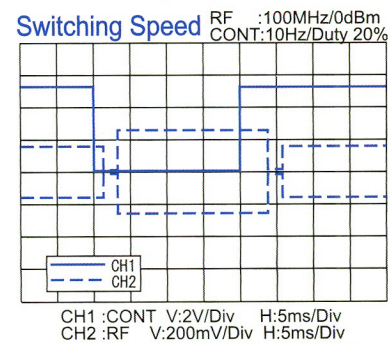
### Normalized Attenuation



### Phase vs Attenuation State



### Switching Speed



**HD Communications Corp.**

2180 Fifth Avenue, Ronkonkoma, NY 11779

Tel: 631-588-3877, Fax: 631-588-3879, www.rfcomp.com