

X-BAND Radar Transponder



MODEL.KTP-9R2B

KTP-9R2B Transponder is a tracking radar transponder for use in missiles or aircraft.

It is designed for use in conjunction with an X-Band tracking radar. The unit maybe operate for single-pulse and double-pulse interrogation.

Main Features

- 200watt minimum peak power output
- Internally constructed high power RF switch
- Tunable over 8.8~9.5GHz
- Superheterodyne receiver
- Reverse polarity protection



Reception Specifications

Transmitter

- Frequency range 8.8~9.5GHz
- Output power 200watt peak @port min.
- Switch control External Control
- Pulse width Adjustable from 0.2 μ s to 0.6 μ s
- Frequency stability \pm 3MHz (for all operating conditions)
- Random triggering 10 pulse per second max.
- Rise time 0.1 μ s max.
- Fall time 0.2 μ s max.
- PRF 10 to 2600 pulses per sec.
- Pulse delay Adjustable 1.8 μ s ~ 9 μ s

Receiver

- Frequency range 8.8~9.5GHz
- Dynamic range +20dBm ~ -60dBm
- Design Superheterodyne
- Stability \pm 2MHz (All operating condition)
- 3dB Bandwidth 11 \pm 3MHz
- Pulse decoder Single or double pulse operating
- Pulse width 0.25 ~ 5 μ s (single pulse operating)
0.25 ~ 1 μ s (double pulse operating)
- Pulse coding space Adjustable 3 ~ 15.5 μ s

Electrical Characteristics

- In/Out Impedance 50 ohm nominal
- Open/Shot circuit Antenna input protected within unit
- Reverse polarity Internal series diode prevents damage from DC voltage reversal
- Voltage transient Internal power diode protection

Mechanical Characteristics

- Dimensions (L x W x H) 210 x 160 x 50mm
- Weight Approx. 2.2Kg

Interfaces

- Antenna connector SMA Female
- Power connector DEMAM9S (FEMALE)
(mates DEMAM9P(MALE))
A = GATE Delay E = +28V
B = Switch Control F = Chassis GND
C = Video G = +28V Return
D = NC H = NC
I = NC

Environmental Specifications

Operating conditions

- Temperature range -40°C to + 80°C
- Altitude 20km
- Vibration 20g rms sine, 20 to 2KHz
- Shocks 100g, 11msec. in any axis
- Acceleration 50g along any axis for 3 minutes
- Humidity Any, up to 100% including condensation

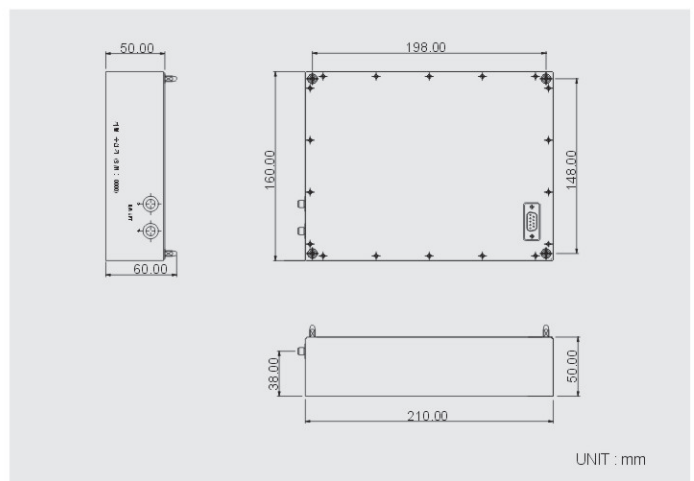
Primary power

- Input voltage range 24V to 32Vdc
- Nominal current <750mA@1000pps

Ordering Information

- Model reference BEACON (KTP-9R2B)

Dimensions



UNIT : mm