

Phasing Diagram - A

|   | 1     | 2     | 3     | 4     |
|---|-------|-------|-------|-------|
| 1 |       | ref.  | - 90° | Isol. |
| 2 | ref.  |       | Isol. | - 90° |
| 3 | - 90° | Isol. |       | ref.  |
| 4 | Isol. | - 90° | ref.  |       |

## PRINCIPAL SPECIFICATIONS

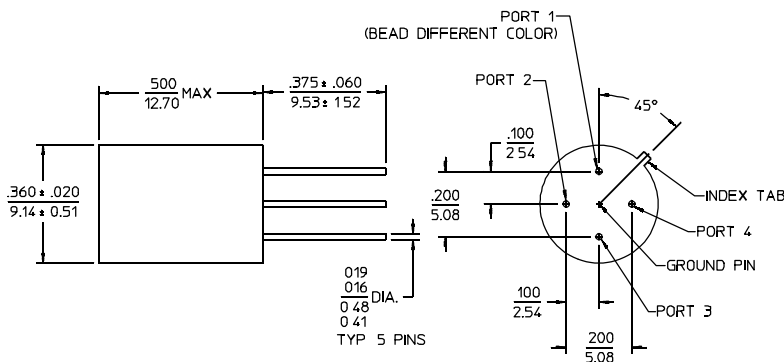
| Model Number | Center Frequency, $f_0$ | Usable Bandwidth, MHz |
|--------------|-------------------------|-----------------------|
| QHT-3-60     | 60 MHz                  | 51 - 69               |
| QHT-3-***B   | 1 to 400 MHz            | $f_0 \pm 15\%$        |

For complete Model Number replace \*\*\* with desired Center Frequency,  $f_0$  in MHz.

## GENERAL SPECIFICATIONS

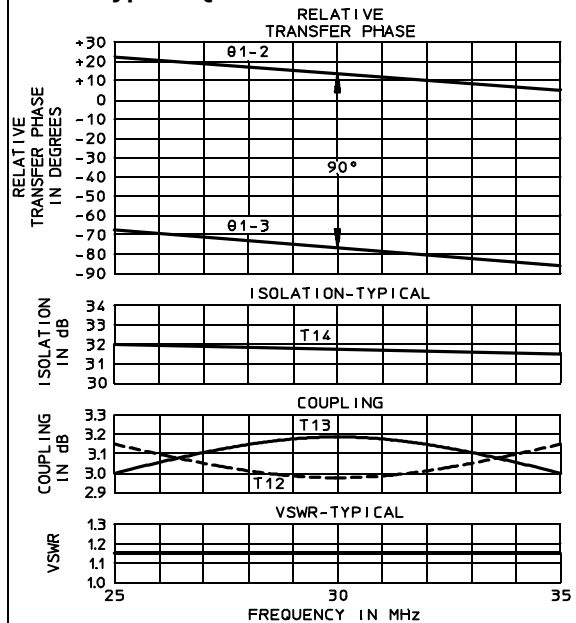
|                        |                             |
|------------------------|-----------------------------|
| Coupling:              | - 3 dB nom.                 |
| Isolation:             | 20 dB min.                  |
| Insertion Loss:        | 0.5 dB max.                 |
| Phase Tolerance:       | $90^\circ \pm 3^\circ$ max. |
| Amplitude Balance:     | 0.5 dB max.                 |
| Impedance:             | 50 $\Omega$ nom.            |
| VSWR:                  | 1.3:1 max.                  |
| CW Input:              | 1 Watt max.                 |
| Weight, nominal:       | 0.1 oz. (2.8 g)             |
| Operating Temperature: | - 55° to +85°C              |

## Package Outline



NOTES:  
1. Tolerance on 3 place decimals  $\pm 0.10(.25)$  except as noted.  
2. Dimensions in inches over millimeters.

## Typical QHT-3-30 Performance



## General Notes:

- The QHT-3 series of two-section hybrids covers 1 to 400 MHz using a special lumped element design to minimize size while maintaining high performance. The TO-5 package used is suitable for aerospace applications where inherent package reliability and hermeticity are essential.
- These units comply with MIL-P-23971 and can be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

20Feb96