



## 90° HYBRID

### MODEL HX06-27

#### 90° QUADRATURE HYBRID

##### Guaranteed Specifications

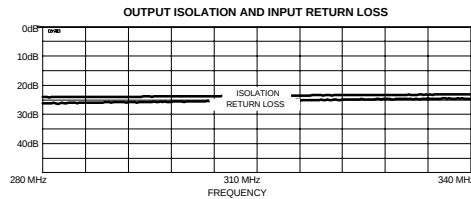
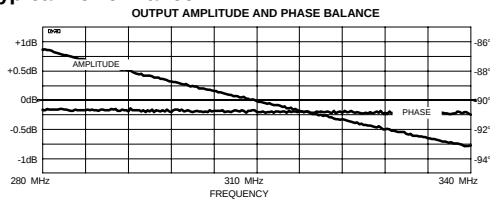
| Parameter         | Range              | Limits            |
|-------------------|--------------------|-------------------|
| Frequency         | 310 MHz            | Center            |
| Bandwidth         | 280 MHz to 340 MHz | Min               |
| Insertion Loss    | 280 MHz to 340 MHz | 0.3 dB Max        |
| Isolation         | 280 MHz to 340 MHz | 20 dB Min         |
| Phase Balance     | 280 MHz to 340 MHz | $\pm 2^\circ$ Max |
| Amplitude Balance | 280 MHz to 340 MHz | $\pm 1$ dB Max    |
| Center Frequency  | 310 MHz            | $\pm 25$ dB Max   |

Note: All specifications apply in a 50 Ohm system.

##### Maximum Ratings

|                   |                |
|-------------------|----------------|
| Input Power       | 1 Watt         |
| Temperature Range | -54°C to +85°C |

##### Typical Performance



##### Reliability

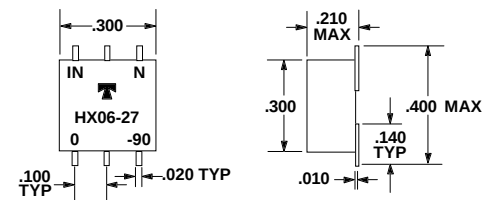
All units are designed and constructed to meet or exceed specifications after exposure to any or all of the following MIL-STD-202 tests which are applicable.

| Test              | Method | Condition |
|-------------------|--------|-----------|
| Temperature Cycle | 107G   | A         |
| Thermal Cycle     | 107G   | AA        |
| Vibration         | 204D   | A         |
| Solderability     | 208F   |           |
| Mechanical Shock  | 213B   | C         |

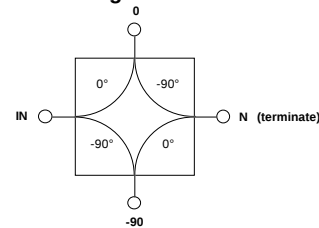
##### Features

- ◆ <0.25 dB Amplitude Balance
- ◆ 1° Phase Balance Typical
- ◆ Small Footprint (0.1 in<sup>2</sup>)
- ◆ Low Cost

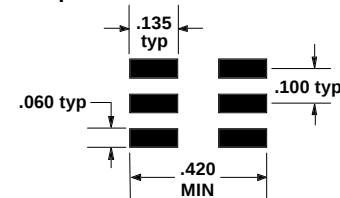
##### Outline Drawing



##### Block Diagram



##### Footprint



All characteristics of Tele-Tech products may be modified to meet customer requirements.