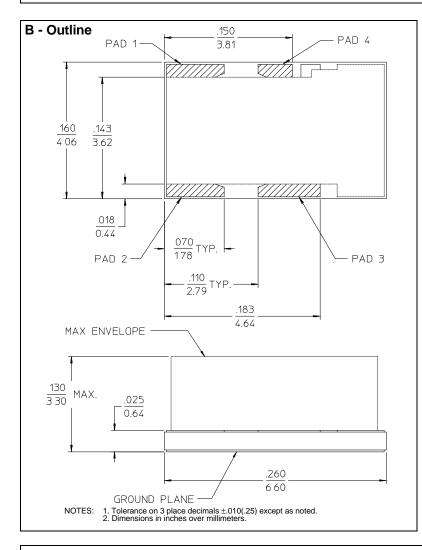
1 to 200 MHz / Symmetrical Phase / High Isolation / Low Insertion Loss / CaseFree Package



|                 | PRINCIPAL SPECIFICATIONS   |                                  |  |                                |                                   |                           |                |
|-----------------|----------------------------|----------------------------------|--|--------------------------------|-----------------------------------|---------------------------|----------------|
| Model<br>Number | Frequency<br>Range,<br>MHz | Performance<br>Bandwidth,<br>MHz | Isolation,<br>E - H Ports,<br>dB, Min. | Insertion<br>Loss, dB,<br>Max. | Amplitude<br>Balance, dB,<br>Max. | Phase<br>Balance,<br>Max. | VSWR,<br>Max.  |
| HJZ-B-100       | 1 - 200 MHz                | 2 - 100<br>1 - 200               | 30<br>20                               | 0.5<br>0.8                     | 0.2<br>0.4                        | ± 3°<br>± 5°              | 1.3:1<br>1.5:1 |



## **GENERAL SPECIFICATIONS**

 $\begin{array}{lll} \mbox{Impedance:} & 50 \ \Omega \ \mbox{nom.} \\ \mbox{Coupling:} & -3 \ \mbox{dB nom.} \\ \mbox{CW Input:} & 1 \ \mbox{Watt max.} \\ \mbox{Weight, nominal:} & 0.007 \ \mbox{oz} \ (200 \ \mbox{mg}) \end{array}$ 

Operating Temperature: -55° to +85°C

## Key to Pads and Signal State

| Δ       | Co-Linear  | Co-Linear                              |
|---------|--|--|
| (Delta) | 1  | 2                                      |
| Pad 3   | Pad 1  | Pad 4                                  |
| In      | 0° ref.  | 180°                                   |
| Isol.   | 0° ref.  | 0°                                     |
|         | $\begin{array}{c} \Delta \\ (\text{Delta}) \\ \text{Pad 3} \\ \text{In} \\ \text{Isol.} \end{array}$ | (Delta) 1<br>Pad 3 Pad 1<br>In 0° ref. |

## **General Notes:**

- 1. The HJZ-B series of  $0^{\circ}/180^{\circ}$  hybrid junctions covers 1 to 200 MHz using lumped element technology to achieve good isolation and balance over wide bandwidths.
- 2. These units have been designed for size and process compatibility with MMIC and similar devices. In particular, the height of the component is limited to 0.130" so that it can be mounted with other miniature components in a low profile hermetic housing.
- 3. The metallized alumina substrate may be attached to the main ground plane using silver epoxy or solder while signal leads may be wire bonded, epoxied or soldered to the gold pads.
- 4. All units comply with MIL-P-23971 and can be supplied screened to comply with specifications you designate for high reliability applications.

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