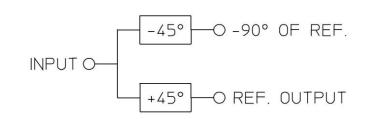
PQF-2E-500 - 90° POWER DIVIDER/COMBINER

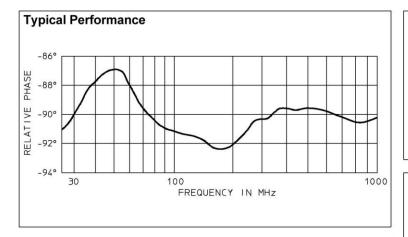
TECHNICAL FEATURE

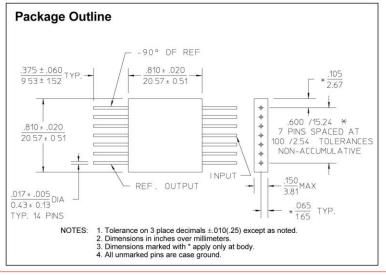
FEATURES

- 30 to1000 MHz
- Uniform Phase & Amplitude Balance
- Low Insertion Loss
- Hi-Rel, Low Profile Flatpack



| PRINCIPAL SPECIFICATIONS | | | | | | | | | | | |
|--------------------------|---------------------|-------------------|------|------------------------|------|---------------------------|------|--------------------|---------|----------------------|-------|
| Model | Frequency Range, | Isolation, dB, | | Insertion Loss, dB, | | Amplitude Balance, dB, | | Phase Tolerance | | VSWR Input/Output | |
| Number | MHz | Min. | Тур. | Max. | Тур. | Max. | Тур. | Max. | Тур. | Max. | Typ. |
| PQF-2E-500 | 30 - 1000 | 15 | 20 | 2.0 | 1.5 | 0.7 | 0.4 | 90°± 5° | 90°± 3° | 1.7:1 | 1.5:1 |





GENERAL SPECIFICATIONS

Coupling: -3 dB nom.Impedance: $50 \Omega \text{ nom.}$

CW Input: 1 W max.(1.2:1 VSWRout)

Internal Load Dissip: 50 mW max.

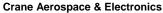
Weight, nominal: 0.32 oz. (9 g)

Operating Temp.: -55° to +85°C

General Notes:

19Feb96

- 1. The PQF-2E-500 is a 90° Power Divider/ Combiner covering 30 MHz to 1 GHz using wideband 45° lead-lag circuits to generate the quadrature phase relationship between the outputs. This approach provides substantially better bandwidth than the conventional narrowband approach of using calibrated line lengths to generate the required phase relationships.
- 2. The design approach used in the PQF-2E-500 makes it suitable for applications requiring extremely broad bandwidth as a logical tradeoff for its increased complexity, insertion loss and size.
- 3. The PQF-2E-500 uses a low profile, space saving flatpack. It may also be supplied in the equivalent R-size Meri-Pac™, E-size Surface mount or connectorized package.



Microwave Solutions – Merrimac Industries 41 Fairfield Place, West Caldwell, NJ 07006

+ 1.973.575.1300 ext. 1309 • <u>mw@crane-eg.com</u>

www.craneae.com/mw

