## Directional Couplers, "PLUS" (1 ... 5 Probes)

- Enhanced coupling
- High directivity
- Coupling varies with frequency
- Coupling is adjusted at reference frequency
- Low VSWR
- Suitable for a wide frequency range
- For indoor application
- Termination load is included


BN 800871


BN 800271C0003

| Part Number |  | $\text { BN } 800471$ | BN 800871C0001 <br> BN 800871C0002 <br> BN 800871C0003 <br> - | BN 800271C0002 <br> BN 800271C0003 <br> BN 800271C0004 <br> BN 800271C0005 | BN 800371C0002 <br> BN 800371C0003 <br> BN 800371C0004 <br> BN 800371C0005 |
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| Frequency range |  |  |  |  |  |
| Reduced performance |  | $0-40 \mathrm{MHz}$ |  |  |  |
| Full performance |  | 40-860 MHz |  |  |  |
| Reduced performance |  | $860 \mathrm{MHz}-3.0 \mathrm{GHz}$ | $860 \mathrm{MHz}-2.1 \mathrm{GHz}$ | $860 \mathrm{MHz}-1.3 \mathrm{GHz}$ | $860 \mathrm{MHz}-1.0 \mathrm{GHz}$ |
| Proof voltage at sea level (NN) |  | $\leq 3 \mathrm{kV}$ | $\leq 7 \mathrm{kV}$ | $\leq 14 \mathrm{kV}$ | $\leq 19 \mathrm{kV}$ |
| Average power (at $+40^{\circ} \mathrm{C}$ ambient temperature) | $\begin{aligned} & 100 \mathrm{MHz} \\ & 230 \mathrm{MHz} \\ & 860 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & \leq 5.3 \mathrm{~kW} \\ & \leq 3.8 \mathrm{~kW} \\ & \leq 2.0 \mathrm{~kW} \end{aligned}$ | $\begin{aligned} & \leq 20.0 \mathrm{~kW} \\ & \leq 13.5 \mathrm{~kW} \\ & \leq 7.0 \mathrm{~kW} \end{aligned}$ | $\begin{aligned} & \leq 67 \mathrm{~kW} \\ & \leq 44 \mathrm{~kW} \\ & \leq 23 \mathrm{~kW} \end{aligned}$ | $\begin{aligned} & \leq 112 \mathrm{~kW} \\ & \leq 74 \mathrm{~kW} \\ & \leq 38 \mathrm{~kW} \end{aligned}$ |
| Coupling range | $\begin{aligned} & 108 \mathrm{MHz} \\ & 230 \mathrm{MHz} \\ & 860 \mathrm{MHz} \end{aligned}$ | $\begin{aligned} & 43-67 d B \\ & 37-61 d B \\ & 29-49 d B \end{aligned}$ | $\begin{aligned} & 51-78 \mathrm{~dB} \\ & 44-72 \mathrm{~dB} \\ & 35-60 \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 51-78 \mathrm{~dB} \\ & 46-75 \mathrm{~dB} \\ & 37-63 \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 54-84 d B \\ & 49-87 d B \\ & 40-66 d B \end{aligned}$ |
| Tolerance of coupling at reference frequency $f_{\text {ref }}$ |  | $\leq \pm 0.1 \mathrm{~dB}$ |  |  |  |
| Variation of coupling at other frequencies |  | $-20 \log _{(10)}\left(\mathrm{f} / \mathrm{fref}_{\text {ref }}\right)$ |  |  |  |
| VSWR main line |  | $\leq 1.04$ |  |  |  |
| Directivity |  | 34-40dB |  |  |  |
| Insertion loss |  | $\leq 0.05 \mathrm{~dB}$ |  |  |  |
| Connectors main line |  | 7-16 male/female | $15 / 8^{\prime \prime}$ EIA female/female | $\begin{aligned} & 3 \text { 1/8" EIA } \\ & \text { female/female } \end{aligned}$ | 4 1/2" EIA female/female (339 IEC 50-105) |
| Connectors coupled line |  | SMA female |  |  |  |
| Termination load 1 W included |  | Do not overload termination load. Please define an adequate coupling factor. |  |  |  |
| Dimensions (LxH) mm |  | $148 \times 98.5$ | $150 \times 92$ | $240 \times 110.5$ | $300 \times 122.5$ |
| Weight |  | $\approx 0.6 \mathrm{~kg}$ | $\approx 1.1 \mathrm{~kg}$ | $\approx 3.5 \mathrm{~kg}$ | $\approx 5.3 \mathrm{~kg}$ |
| Environmental conditions |  | For limitations see "Environmental Conditions for Broadcast Products". |  |  |  |

