

FEATURES

- Low Profile Surface Mount Package
- High Power
- Low Insertion Loss
- High Isolation
- RoHS Compliant
- Tape and Reel available for High Volume Production
- 100% RF Tested

APPLICATIONS

- Power Amplifiers
- Power Monitors
- Reflectometers
- Signal Distribution Networks
- Switch Networks
- Phase Shifters

GENERAL DESCRIPTION

The D3DP05F is a high performance directional coupler in a surface mount package. This low profile coupler handles up to 200 watts of CW power. The D3DP05F is designed for those demanding applications where high power, low loss and excellent directivity are required.

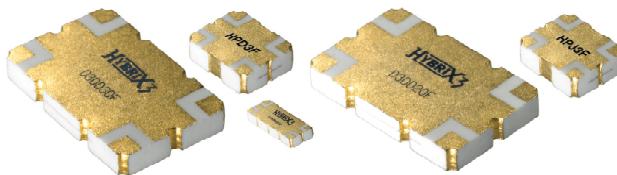
The D3DP05F is manufactured with materials that have thermal expansion characteristics compatible with industry standard board materials like RO3003, RO4350, FR4 and others. The couplers are available in a RoHS compliant finish and packaged in tape and reel.

ELECTRICAL SPECIFICATIONS*

| Frequency MHz | Coupling (dB) | Directivity dB (min) | Insertion Loss dB (max) | VSWR (max) | Power Handling Watts CW | Operating Temperature °C |
|------------------|------------------|-------------------------|-------------------------------|---------------|-------------------------------|--------------------------------|
| 2300-2700 | 5 ± 0.25 | 20 | 0.15 | 1.2 | 200 | -55 to +125 |

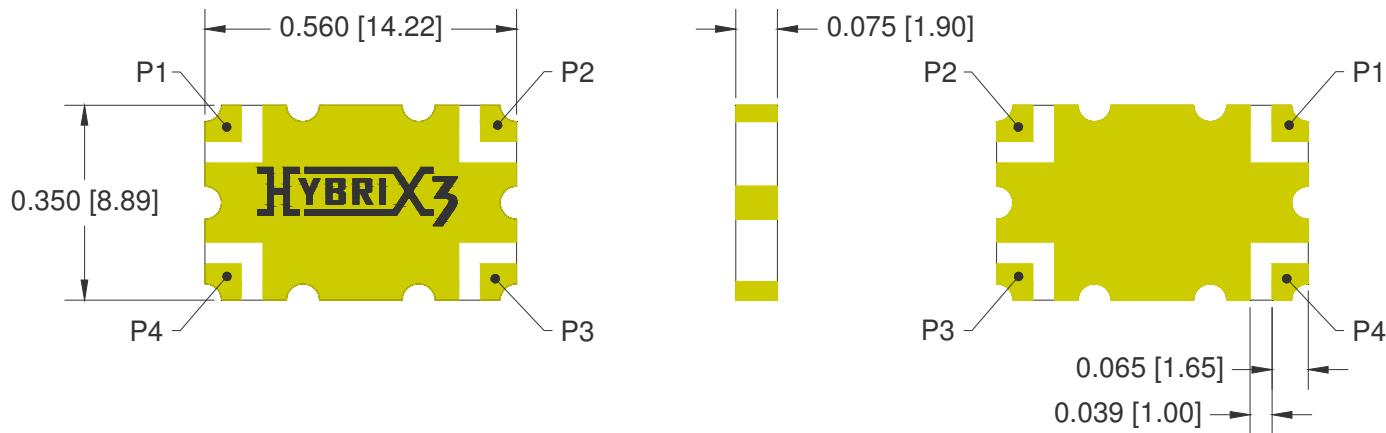
Specification Notes:

* Measured on Florida RF Labs test fixture. Specifications are subject to change without notice.



COUPLER PIN CONFIGURATION AND MECHANICAL OUTLINE

| PORtS | P1 | P2 | P3 | P4 |
|-------|------|------|------|------|
| P1 | - | ISO | OUT | COUP |
| P2 | ISO | - | COUP | OUT |
| P3 | COUP | OUT | - | ISO |
| P4 | OUT | COUP | ISO | - |



COMMONLY USED ATTACHMENT MATERIALS

| Material | Composition | Thermal Conductivity (Watts/cm ² /°C) | Melting Temperature (°C) |
|------------------|-------------------------------------|--|--------------------------|
| Gold-Tin Solder | 80% Gold / 20% Tin | 0.58 | 280 |
| Lead-Free Solder | 99.3% Tin – 0.7% Copper | N/A | 227 |
| Lead-Free Solder | 96.5% Tin / 3.5% Silver | 0.33 | 221 |
| Lead-Free Solder | 96.5% Tin / 3% Silver / 0.5% Copper | N/A | 217 - 220 |
| Sn63 Solder | 63% Tin / 37% Lead | 0.49 | 183 |
| Conductive Epoxy | Silver Filled | 0.01 to 0.29 | N/A |