

FP-532
Wideband
RF/Pulse
Transformer
1-80 MHz



DESCRIPTION

Subminiature size, easily solderable or weldable planar ribbon leads and high performance design makes the FP transformer ideal for MIC substrate and printed circuits.

These transformers are high reliability devices designed to meet MIL-T-55631. Typical applications are: Interstage coupling, phase detection, DC decoupling, voltage/current step up/step down and pulse transformation.

GUARANTEED MINIMUM PERFORMANCE DATA

SPECIFICATIONS FOR MODEL FP-532

Type: 50 ohm unbalanced
600 ohm balanced
DC isolated C.T.

| | |
|---------------------------------------|------|
| - 1 dB Bandwidth, MHz | 1-80 |
| Midband insertion loss dB | 1.0 |
| Amplitude unbalance dB | .3 |
| Phase unbalance (deviation from 180°) | 10 |
| VSWR 1-50 MHz | 2:1 |

NOTE:

- 1 dB bandwidth is measured relative to midband loss.

ABSOLUTE MAXIMUM RATINGS:

Input power *1 w. above 10 MHz,
.25 w. below 10 MHz
Temperature range - 54° to + 100°C

*Includes DC current effects by approx. $(I_{DC}^2 + I_{RF}^2)Z \cong P_{max}$.

ENVIRONMENTAL CONDITIONS

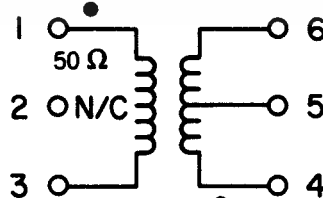
GUARANTEED ENVIRONMENTAL PERFORMANCE:

All units are designed to meet their specifications over - 54°C to + 100°C and after exposure to any or all of the following tests per MIL-STD-202E.

| Exposure | Method | Test Condition |
|--|--------|----------------|
| Thermal Shock | 107D | B |
| Altitude | 105C | G |
| H.F. Vibration | 204C | D |
| Mechanical Shock | 213B | C |
| Random Vibration (15 minutes per axis) | 214 | IIF |
| Solderability | 208C | |
| Terminal Strength | 211A | C |
| Resistance to Soldering Heat | 210A | B |

Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

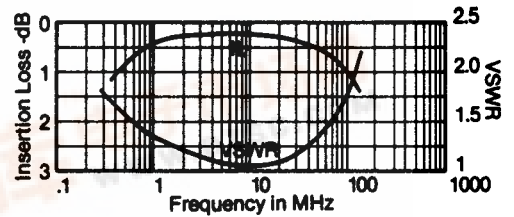
FUNCTIONAL SCHEMATIC



TYPICAL PERFORMANCE

FP-532

Risetime: .2 nS
Droop: (10%) 350 nS
Group delay: < 2 nS



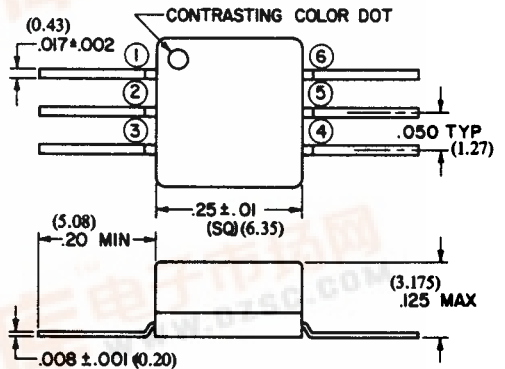
PACKAGE

MATERIAL:

Header: Glass filled epoxy
Leads: Kovar per MIL-STD-1276,
Type K

FINISH:

Header: Black epoxy
Leads: Hot dipped solder, tin lead underplate.



XXX ± .005
(XX ± .13)

