

3-WAY IN-PHASE DIVIDER/COMBINER

MODEL DF10-27

Guaranteed Specifications

| Parameter | Parameter Range Limits | |
|-------------------|------------------------|------------|
| Parameter | Range | LIIIIII |
| Frequency | 1 MHz to 300 MHz | Min |
| Insertion Loss | 1 MHz to 300 MHz | .5 dB Max |
| Isolation | 1 MHz to 300 MHz | 20 dB Min |
| Amplitude Balance | 1 MHz to 300 MHz | .25 dB Max |
| Phase Balance | 1 MHz to 100 MHz | 1° Max |
| | 1 MHz to 300 MHz | 4° Max |
| VSWR Input port | 1 MHz to 200 MHz | 1.2:1 Max |
| | 200 MHz to 300 MHz | 1.5:1 Max |
| Impedance | 50 Ohms | Nominal |

Note: All specifications apply in a 50 Ohm system. 75 Ohm models are

Maximum Ratings

| Input Power | 1 Watt |
|----------------------|----------------|
| Internal Dissipation | 100 mW |
| Temperature Range | -54°C to +85°C |

Reliability

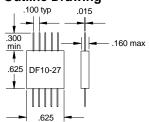
All units are designed and constructed to meet or exceed specifications after exposure to any or all of the following MIL-STD-202 tests which are applicable.

| Test | Method | Condition |
|-------------------|--------|-----------|
| Temperature Cycle | 107G | А |
| Thermal Cycle | 107G | AA |
| Seal | 112E | D |
| Vibration | 204D | Α |
| Solderability | 208F | |
| Terminal Strength | 211A | Α |
| Terminal Fatigue | 211A | С |
| Mechanical Shock | 213B | С |

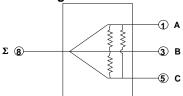
Features

- ♦ >3 Decade Bandwidth
 - ♦ Small Footprint (0.4 in²)
 - ♦ <0.3 dB Midband Loss
 - ♦ >30 dB Midband Isolation

Outline Drawing



Block Diagram



Case is Signal Ground

Connections



| PORT A | 1 |
|--------|--------------|
| PORT B | 3 |
| PORT C | 5 |
| SUM | 8 |
| GROUND | 2,4,6,7,9,10 |
| | |

All characteristics of Tele-Tech products may be modified to meet customer requirements.