

# Audio Transformer MIL-T-27E High Reliability: "Red Spec" Series

### **SP-29**

#### **Description:**

Triad's high reliability audio transformers provide the durability and precision required in today's demanding designs. These transformers are available for a wide variety of applications.

#### **Electrical Specifications (@25C)**

| Power | Matching  | Impedance | Max. Ma DC | DC Resi | Overall   |          |  |
|-------|-----------|-----------|------------|---------|-----------|----------|--|
| level | Duimanu   | Secondary | Unbalance  | Duiman  | Casandam  | Turns    |  |
| (mW)  | Primary   |           | in Primary | Primary | Secondary | Ratio    |  |
| 50    | 10,000 CT | 500 CT    | 1.0        | 1,050.0 | 80        | 4.47:1.0 |  |

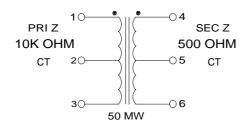
Frequency Response: ± 2.0 DB, at 300 Hz to 100K Hz

Pri-Sec Hipot test (Pri-Sec): 1,000 VRMS for 1 sec.

Working voltage: 150VDC

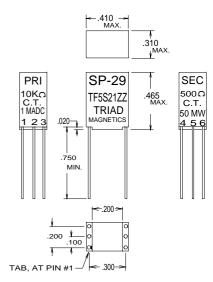
#### **Construction:**

Plug-in terminals are precision spaced to provide fixed mounting centers. Epoxy molded case includes a .020" recess for ease of solder inspection. Leads are made of high strength Nickel alloy, gold plated and are .020" in diameter.



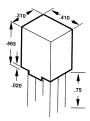
RoHS Compliance: As of manufacturing date February 2005, all standard products meet the requirements of 2002/95/EC, known as the RoHS initiative.





## Audio Transformers

#### Mil-T-27E



**Red Spec** (MiL-T-27E)

#### :: Description

Triad high reliability audio transformers provide the durability and precision required in today's demanding designs. These transformers are available for a wide variety of applications. The line of Red Spec audio transformers is designed and constructed to meet the rigid requirements of MIL-T-27E. These transformers feature an epoxy molded case, gold plated leads and exceptional operation from 300 Hz to 100 kHz.

#### :: Specifications

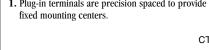
Frequency Response Ranges: 300 Hz to 100 kHz

#### ∷ Red Spec Printed Circuit Audio Transformers

|         | Туре             | Mil Type                | Power<br>Level |                    | ng Impedance     | Max. Ma DC<br>Unbalanced |         | sistance     | Overall<br>Turns | Figure |
|---------|------------------|-------------------------|----------------|--------------------|------------------|--------------------------|---------|--------------|------------------|--------|
| Section | No.              | No.                     | in mW          | Primary            | Secondary        | in Primary               | Primary | Secondary    | Ratio            | No.    |
| A       | SP-4             | TF5S21ZZ                | 10             | 200,000 CT         | 1,000 CT         | 0.0                      | 5,300.0 | 100.0        | 14.1:1.0         | 3      |
| В       | SP-5             | TF5S21ZZ                | 25             | 50,000 CT          | 1,000 CT         | 0.0                      | 3,800.0 | 75.0         | 7.1:1.0          | 3      |
| С       | SP-13            | TF5S21ZZ                | 40             | 25,000 CT/20,000 C | T 1,000/800 CT   | 0.5                      | 1,700.0 | 115.0        | 5.0:1.0          | 3      |
|         | SP-20            | TF5S21ZZ                | 50             | 10,000 CT          | 1,200 CT         | 1.0                      | 1,050.0 | 200.0        | 2.88:1.0         | 3      |
|         | SP-21            | TF5S21ZZ                | 50             | 10,000 CT          | 2,000 CT         | 1.0                      | 1,050.0 | 330.0        | 2.24:1.0         | 3      |
|         | SP-22            | TF5S21ZZ                | 50             | 10,000             | 2,000 CT/500§    | 1.0                      | 1,050.0 | 146.0/168.0§ | 4.48:1.0:1.0     | 4      |
|         | SP-29            | TF5S21ZZ                | 50             | 10,000 CT          | 500 CT           | 1.0                      | 1,050.0 | 80.0         | 4:47:1.0         | 3      |
|         | SP-33            | TF5S21ZZ                | 50             | 1,000              | 50               | 3.0                      | 145.0   | 8.0          | 4.4:1.0          | 1      |
|         | SP-42            | TF5S21ZZ                | 50             | 150 CT             | 12               | 10.0                     | 18.0    | 2.7          | 3.54:1.0         | 2      |
| D       | SP-48            | TF5S21ZZ                | 50             | 7,500 CT           | 12               | 1.0                      | 796.0   | 2.9          | 25.0:1.0         | 2      |
| Ь       | SP-49            | TF5S21ZZ                | 50             | 300 CT             | 600              | 7.0                      | 41.0    | 98.0         | 1.0:1.42         | 2      |
|         | SP-50            | TF5S21ZZ                | 50             | 500 CT             | 600              | 3.0                      | 67.0    | 98.0         | 1.0:1.1          | 2      |
|         | SP-51            | TF5S21ZZ                | 50             | 900 CT             | 600              | 4.0                      | 104.0   | 96.0         | 1.22:1.0         | 2      |
|         | SP-52            | TF5S21ZZ                | 50             | 1,500 CT           | 600              | 3.0                      | 168.0   | 92.0         | 1.58:1.0         | 2      |
|         | SP-66            | TF5S21ZZ                | 50             | 10,000 CT          | 10,000 CT        | 1.0                      | 1,000.0 | 1,300.0      | 1.0:1.0          | 3      |
|         | SP-67            | TF5S21ZZ                | 50             | 600 CT             | 600 CT           | 3.0                      | 72.0    | 92.0         | 1.0:1.0          | 3      |
|         | SP-68            | TF5S21ZZ                | 50             | 10,000             | 10,000 CT/2,500§ | 1.0                      | 1,000.0 | 565.0/650.0§ | 2.1:1.0          | 4      |
|         | SP-69            | TF5S21ZZ                | 50             | 600                | 600 CT/150§      | 3.0                      | 72.0    | 40.0/45.0§   | 2.0:1.0:1.0      | 4      |
|         | SP-70            | TF5S21ZZ                | 50             | 600                | 600              | 3.0                      | 72.0    | 92.0         | 1.0:1.0          | 1      |
| E       | SP-128<br>SP-310 | TF5S21ZZ<br>Shield Only | •              | 0.1H               | •                | 5.0                      | 15.0    | •            | •                | 5      |

CT = Center Tap § Split secondary

#### :: Outline Dimensions



- 2. Red Spec transformers are hi-pot tested at 1,000 VRMS.
- 4. Red Spec transformers feature small footprint base dimensions of .310 by .410 inch.

