

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

## **SP-13**

## **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 I	npedance	Max. Ma DC	DC Resi	Overall		
level	D	Secondary	Unbalance	Dutana	Secondary	Turns	
(mW)	Primary		in Primary	Primary		Ratio	
40	25K CT/20K CT	1K CT/800CT	0.5	1,700.0	115.0	5.0:1.0	

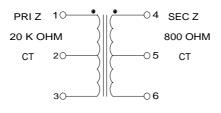
Frequency Response: + 2.0 DB, at 300 Hz to 100K Hz

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

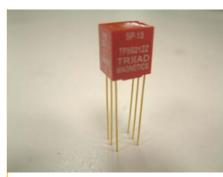
Working voltage: 150VDC

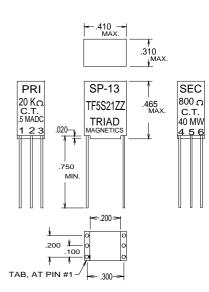
## **Construction:**

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.



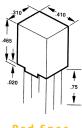
**RoHS Compliance:** As of manufacturing date February 2005, all standard products meet the requirements of 2002/95/EC, known as the RoHS initiative.





# Audio Transformers

## M i I - T - 2 7 E



**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**

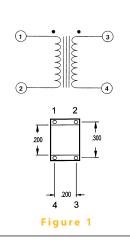
Section	Type No.	Mil Type No.	Power Level in mW	Matching Impedance		Max. Ma DC Unbalanced <u>DC Resistance</u> in Primary Primary Secondary		Overall Turns Ratio	Figure No.	
Section				-				,		
A	SP-4	TF5S21ZZ	10	200,000 CT	1,000 CT	0.0	5,300.0	100.0	14.1:1.0	3
В	SP-5	TF5S21ZZ	25	50,000 CT	1,000 CT	0.0	3,800.0	75.0	7.1:1.0	3
С	SP-13	TF5S21ZZ	40	25,000 CT/20,000 CT	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
D	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
Е	SP-128 SP-310	TF5S21ZZ Shield Only	٠	0.1H	•	5.0	15.0	•	•	5

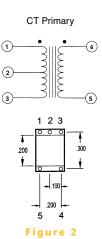
CT = Center Tap § Split secondary

### :: Outline Dimensions

#### **Technical Notes**

1. Plug-in terminals are precision spaced to provide fixed mounting centers.





2. Red Spec transformers are hi-pot tested at 1,000 VRMS. 3. 150 VDC working voltage.

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3

.200

Tap Primary - Tap Secondary

123

000

-.10

200

654

Figure 3

-(4)

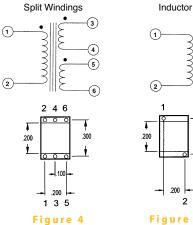
-(5)

6

.300

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- 4. Red Spec transformers feature small footprint base dimensions of .310 by .410 inch.
- 5. Pin diameter = .020 inch.



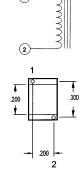


Figure 5