

SWITCHING REGULATOR INDUCTORS

....OFF-THE-SHELF

* Designed to meet the requirements of: **MIL-T-27/287/288/289**

* 24 standard designs. Type **TF5S04ZZ**

Trans American Transformer provides custom signal transformers with high accuracies over the full-military temperature range. Our specialty is High Performance and Consistency in the smallest size. Your design or our design to your specifications.

These transformers are fully encapsulated P-C mount toroidal units. They are manufactured in accordance with Mil-T-27 Grade 5. They have high input impedance and low output impedance combined with high transformation accuracy and minimum quadrature. These characteristics make these units particularly useful in solid state synchro to digital and digital to synchro converter applications.

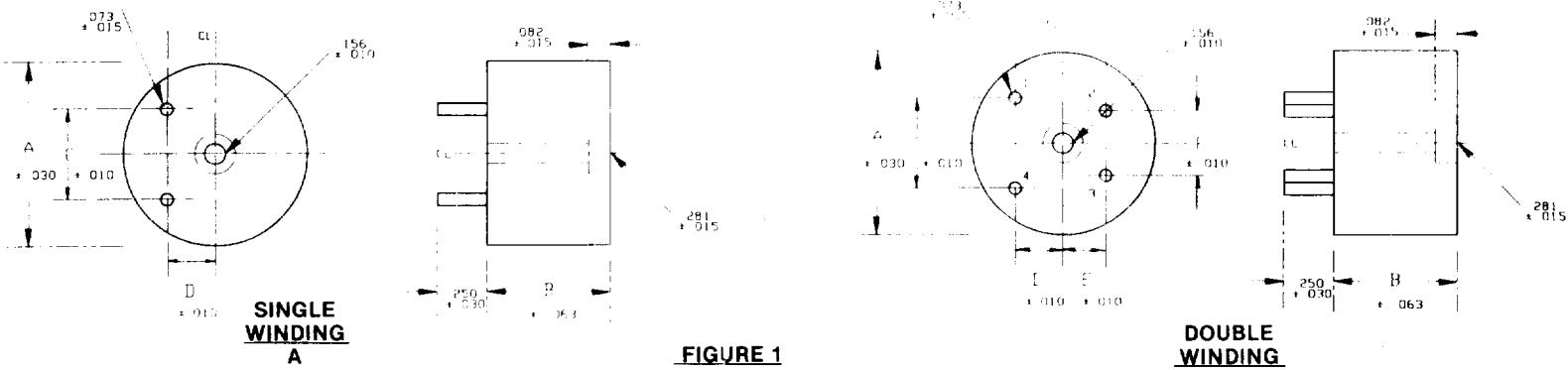
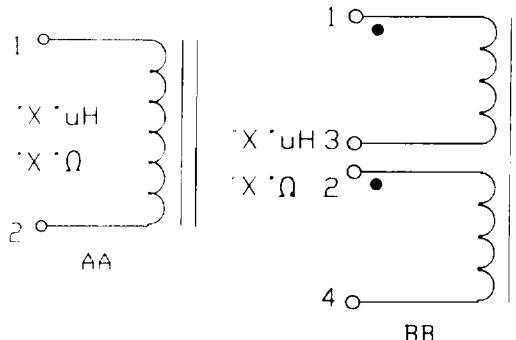


FIGURE 1

INCHES	MM
.010	.25
.015	.38
.030	.76
.063	1.60
.073	1.85
.082	2.08
.156	3.96
.200	5.08
.250	6.35
.281	7.14
.300	7.62
.400	10.16
.438	11.13
.500	12.70
.563	14.30
.600	15.24
.688	17.48
.750	19.05
.800	20.32
.813	20.65
.875	22.22
1.188	30.18
1.375	34.92



CIRCUIT
DIAGRAM
AND
MARKING
See Table
2, 3 and 4
for value
of "X"

TABLE 1.

Part Number	A	B	C	D	E	F	WT OZ.
10548	Single	.875	.438	.400	.200	—	—
	Double		.563		.200	.200	0.6
10549	Single	1.188	.563	.600	.300	—	—
	Double		.688			.300	.400
10550	Single	1.375	.750	.800	.300	—	—
	Double		.813			.500	.400

Design and Construction:

- Dielectric withstanding voltage at sea level: 1000 Vrms.
- Temperature Rise: 45°C with 1 volt rms, 10 KHZ and current as specified in electrical ratings table at an ambient temperature of 85°C maximum.
- Altitude: 75,000 feet maximum.
- Operating Temperature Range: -55°C to +130°C.
- Weight Max: See table 1.
- Dimensions: See table 1 and figures A and B.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Marking shall be on the side and on top.
4. Electrical values shall be marked as specified in table 2, 3 or 4, as applicable.
5. Circuit diagram BB, for series connection join terminals 2 and 3 for parallel connection join terminals 1 and 2, 3 and 4.

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THE SOURCE FOR MILITARY MAGNETICS

10548-XX see order info.

TABLE 2. Electrical ratings.

Dash number 1/	Inductance (μ h) +15 -5% 2/ 3/	DC current (amps) max 2/ 4/	DC resistance (ohms) max 2/	Working voltage (peak) volts 5/	Pin arrangement (see figure 1)	Circuit diagram (see figure 1)	Voltage
01	1250	1.2	.7	357	A	AA	1 volt at 10 kHz
02	800	1.5	.45	357	A	AA	1 volt at 10 kHz
03	500	1.8	.3	357	A	AA	1 volt at 10 kHz
04	350	2.2	.2	357	A	AA	1 volt at 10 kHz
05	<u>200</u> <u>50</u>	<u>.3</u> <u>.6</u>	<u>.12</u> <u>.03</u>	357	B	BB	1 volt at 10 kHz
06	<u>88</u> <u>22</u>	<u>4.5</u> <u>.9</u>	<u>.052</u> <u>.013</u>	357	B	BB	1 volt at 10 kHz
07	<u>32</u> <u>8</u>	<u>7.5</u> <u>.15</u>	<u>.02</u> <u>.005</u>	357	B	BB	1 volt at 10 kHz

TABLE 3. Electrical ratings.

10549-XX see order info.

Dash number 1/	Inductance (μ h) +15 -5% 2/ 3/	DC current (amps) max 2/ 4/	DC resistance (ohms) max 2/	Working voltage (peak) volts 5/	Pin arrangement (see figure 1)	Circuit diagram (see figure 1)	Voltage
01	3000	1.2	1.2	357	A	AA	1 volt at 10 kHz
02	2000	1.5	.8	357	A	AA	1 volt at 10 kHz
03	1200	1.88	.5	357	A	AA	1 volt at 10 kHz
04	780	2.4	.3	357	A	AA	1 volt at 10 kHz
05	520	3	.2	357	A	AA	1 volt at 10 kHz
06	320	3.75	.13	357	A	AA	1 volt at 10 kHz
07	<u>220</u> <u>55</u>	<u>4.5</u> <u>.9</u>	<u>.08</u> <u>.02</u>	357	B	BB	1 volt at 10 kHz
08	<u>120</u> <u>30</u>	<u>6</u> <u>.12</u>	<u>.05</u> <u>.013</u>	357	B	BB	1 volt at 10 kHz
09	<u>80</u> <u>20</u>	<u>7.5</u> <u>.15</u>	<u>.032</u> <u>.008</u>	357	B	BB	1 volt at 10 kHz

TABLE 4. Electrical ratings.

10550-XX see order info.

Dash number 1/	Inductance (μ h) +15 -5% 2/ 3/	DC current (amps) max 2/ 4/	DC resistance (ohms) max 2/	Working voltage (peak) volts 5/	Pin arrangement (see figure 1)	Circuit diagram (see figure 1)	Voltage
01	10,000	1.1	2.1	357	A	AA	1 volt at 10 kHz
02	6,400	1.35	1.4	357	A	AA	1 volt at 10 kHz
03	2,500	2.2	.55	357	A	AA	1 volt at 10 kHz
04	1,600	2.8	.34	357	A	AA	1 volt at 10 kHz
05	1,000	3.5	.21	357	A	AA	1 volt at 10 kHz
06	<u>640</u> <u>160</u>	<u>4.5</u> <u>.9</u>	<u>.13</u> <u>.033</u>	357	B	BB	1 volt at 10 kHz
07	<u>400</u> <u>100</u>	<u>5.4</u> <u>10.8</u>	<u>.088</u> <u>.022</u>	357	B	BB	1 volt at 10 kHz
08	<u>240</u> <u>60</u>	<u>6.8</u> <u>13.6</u>	<u>.056</u> <u>.014</u>	357	B	BB	1 volt at 10 kHz

1/ See order info.

2/ Where electrical values are written one above the other they indicate the values from series or parallel connections respectively, series parallel

3/ The inductance is measured with 0 Adc applied and at the specified voltage and frequency.

4/ At rated DC current, inductance will exceed 80% of rated inductance.

5/ Between windings, 50 volts peak.

Order Information:

10548-XX = Mil-T-27/287-XX: -XX = Dash number see Table 2

10549-XX = Mil-T-27/288-XX: -XX = Dash number see Table 3

10550-XX = Mil-T-27/289-XX: -XX = Dash number see Table 4