# Low Level Audio

**HERMETICALLY SEALED**

Triad low-level audio transformers have been adopted as standard by many manufacturers of the finest in audio equipment. No other transformers offer such wide frequency range and such effective magnetic shielding in such small size. Shielding up to 95 db. is attained by multiple "Trialloy" cases interleaved with heavy copper shading rings. These transformers are solidly constructed, rigidly mounted with welded stainless steel studs, and hermetically sealed to MIL-T-27 specifications. Beautiful appearance, unmatched performance, long life, minimum size, are outstanding features of these quality transformers.

## AUDIO INPUT Transformers

| Type No. | Mil Type | Application | Primary Source Impedence | Turn Ratio | Secondary Load Impedance | Freq. Resp. | Max. Level DBM | Shield-ing | Case |
|---|---|---|---|---|---|---|---|---|---|
| **HS-1** | TF1QX10YY | Univ. line or mike to grid. | 600*/250*/ 150/62.5 | 1:11.3 | 77000 | 20-20000 | 10 | P-5 | GP-4 |
| **HS-11** | TF1QX10YY | Same as above. | | | | | | P-1 | GP-2 |
| **HS-3** | TF1QX10YY | Univ. line or mike to p.p. class A grids. | 600*/250*/ 150/62.5 | 1:14 overall | 117600 CT. | 20-20000 | 10 | P-5 | GP-5 |
| **HS-4** | TF1QX10YY | Same as above. | | | | | | P-3 | GP-4 |
| **HS-14** | TF1QX10YY | Same as above. | | | | | | P-1 | GP-3 |
| **HS-15** | TF1QX11YY | Line to one or two grids. DC in pri. | 600*/250*/ 150/62.5 (10 Ma.) | 1:8 overall | 38400 CT. | 30-20000 | 20 | P-3 | GP-5 |
| **HS-5** | TF1QX10YY | Dynamic mike to grid—Hi-gain. | 30-50 | 1:65.7 | 130000 | 50-10000 | 0 | P-5 | GP-4 |
| **HS-8** | TF1QX10YY | Line to p.p. class A grids—Hi-level. | 600*/250*/ 150/62.5 | 1:14 overall | 117600 CT. | 20-20000 | 20 | P-1 | GP-4 |

*Balanced center tap.

Low frequency loss will result from use of unbalanced DC in windings other than where specified.

## AUDIO INTERSTAGE Transformers

| Type No. | Mil Type | Application | Primary Source Impedance | Turn Ratio | Secondary Load Impedance | Freq. Resp. | Max. Level Pri. Volts | Shield-ing | Case |
|---|---|---|---|---|---|---|---|---|---|
| **HS-23** | TF1QX10YY | Single plate to single grid. | 15000 | 1:2.7 | 110000 | 20-20000 | 15 | P-3 | GP-4 |
| **HS-25** | TF1QX10YY | Single plate to p.p. class A grids. | 15000 | 1:2.72 overall | 110000 CT. | 20-20000 | 25 | P-1 | GP-4 |
| **HS-35** | TF1QX10YY | Single plate to p.p. class A grids. | 15000 | 1:2.72 overall | 111000 CT. | 20-20000 | 20 | P-1 | GP-2 |
| **HS-27** | TF1QX15YY | P.p. plates to p.p. class A grids. | 20000/ 5000 | 1:1.72 overall | 60000 CT. | 20-20000 | 50 | P-1 | GP-4 |
| **HS-29** | TF1QX10YY | Bridging-line to 1 or 2 grids. | 20000/ 5000 | 1:2 overall | 80000 CT. | 20-20000 | 20 | P-5 | GP-4 |
| **†HSM-31** | TF1RX19FA | P.p. 6J5's or parallel-fed 6F6 triode to AB grids. | 20000/ 5000 | 1:1 or 2:1 | 20000 or 5000 CT. | 20-20000 | 240 | | FA |
| **HS-32** | TF1QX15YY | Single plate to p.p. grids. DC in pri. | 15000 (6 Ma.) | 1:2 overall | 60000 CT. | 20-15000 | 20 | P-1 | GP-5 |

†See chart on page 9 for case size.

Low frequency loss will result from use of unbalanced DC in windings other than where specified.

## AUDIO LOW LEVEL OUTPUT, MIXING, MATCHING, BRIDGING

| Type No. | Mil Type | Application | Primary Source Impedance | Secondary Load Impedance | Freq. Resp. | Max. Level DBM | Shielding | Case |
|---|---|---|---|---|---|---|---|---|
| **HS-50** | TF1QX16YY | Plate to universal line. | 15000 | 600*/250*/ 150/62.5 | 20-20000 | 26 | P-3 | GP-4 |
| **HS-60** | TF1QX16YY | Plate to universal line. | 15000 | 600*/250*/ 150/62.5 | 20-20000 | 10 | P-1 | GP-2 |
| **HS-61** | TF1QX13YY | Plate to universal line.—DC in pri. | 15000 (5 Ma.) | 600*/250*/ 150/62.5 | 50-15000 | 20 | P-1 | GP-5 |
| **HS-52** | TF1QX13YY | P.p. plates to universal line. | 20000/ 5000 | 600*/250*/ 150/62.5 | 20-20000 | 26 | P-1 | GP-4 |
| **HS-54** | TF1QX19YY | Bridging, single or p.p. plates, to univ. line. | 20000/ 5000 | 600*/250*/ 150/62.5 | 20-20000 | 10 | P-5 | GP-4 |
| **HS-56** | TF1QX16YY | Universal line to universal line. | 600*/250*/ 150/62.5 | 600*/250*/ 150/62.5 | 10-30000 | 20 | P-3 | GP-4 |
| **HS-66** | TF1QX16YY | Same as above. | | | 10-30000 | 20 | P-1 | GP-3 |
| **HS-58** | TF1QX16YY | Line-to-line, balanced resistance & capacities | 600*/250*/ 150/62.5 | 600*/250*/ 150/62.5 | 20-30000 | 15 | P-3H | GP-5 |

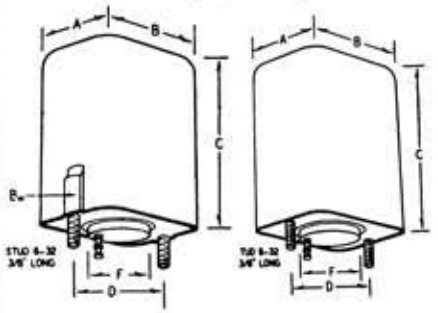
*Balanced center tap.

Low frequency loss will result from use of unbalanced DC in windings other than where specified.

**Triad Magnetics, 460 Harley Knox Blvd., Perris CA 92571**

**www.TriadMagnetics.com**

**HS Series (GP Case)**




**GP-1, -2, -3** **GP-4, -5**

### Avoid redesign— Use Triad HS and HSM transformers in military prototypes

Triad HS and HSM series transformers are designed to meet MIL-T-27 requirements. Most of these transformers use standard MIL-T-27 case sizes. Exceptions are GP cases or any cases showing a Bw dimension, which may be classified as MIL-T-27 'YY' cases. Equipment using these transformers need not be redesigned to submit for military approval. The basically good design factors which are necessary to meet MIL-T-27 standards for performance ensure longest life in any class of service.

These transformers are permanently marked with electrical and test data as specified in MIL-T-27. All are "Climatite" treated, use sturdy TRIAD terminals and are beautifully finished in grey enamel.

| | GP-1 | GP-2 | GP-3 | GP-4 | GP-5 |
|---|---|---|---|---|---|
| **A** | 7/8 | 1 1/16 | 1 1/4 | 1 7/16 | 1 5/8 |
| **B** | 1 1/16 | 1 1/4 | 1 1/2 | 1 3/4 | 2 |
| **Bw** | 1 3/8 | 1 11/32 | 1 5/8 | | |
| **C** | 1 11/16 | 2 1/4 | 2 5/8 | 2 1/2 | 2 3/4 |
| **D** | 1 3/32 | 1 3/16 | 1 11/32 | 1 1/2 | 1 1/2 |
| **F** | 3/4 | 3/4 | 11/16 | 11/16 | 11/16 |
| **Wt.** | 3 oz. | 5 1/2 oz. | 8 oz. | 12 oz. | 17 oz. |

### SHIELDING

**P-1** — One nickel alloy high permeability shield — 45db. reduction in pickup.

**P-3** — Two nickel alloy shields interleaved with one heavy copper shading ring — 70db. reduction in pickup.

**P-5** — Three nickel alloy shields interleaved with two heavy copper shading rings — 95db. reduction in pickup.

# Mouser Electronics

Authorized Distributor

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Triad Magnetics:

HS-54 HS-1 HS-52 HS-56 HS-5 HS-25 HS-8 HS-50 HS-29 HS-4 HS-23 HS-27