# U.H.F. Thermocouples

## Code: T2H/60JA & B

These thermocouples are suitable for monitoring within the frequency range 300 Mc/s to 6000 Mc/s and are designed for building into the walls of resonators, wave-guides, and coaxial-lines, without leakage or appreciable loss.

They are small disc-seal tubes with an end cap. On one side of the disc is the R.F. pick-up loop of which the thermo-junction of manganin and constantan form a part.

The loop is incomplete for D.C. but the H.F. circuit is completed to the disc through a decoupling capacitor of approximately 35 pF. At the lower frequency end of the range an additional decoupling capacitance may be required.

The JA types are so connected that the output is positive at the end cap. The JB types have the end cap negative to the disc. The disc is notched on its periphery to provide location of the plane of the loop with respect to the mounting.

### DIMENSIONS

| | | |
|---|---|---|
| Maximum overall length | 54 | mm |
| Maximum disc diameter | 22.65 | mm |
| Maximum bulb diameter | 10.3 | mm |

### CHARACTERISTICS

| Type | Nominal Resistance of couple | Maximum safe heater current | Heater current required to produce in couple an open circuit e.m.f. of 15 mV |
|---|---|---|---|
| T2H/60JA & B | 6 Ω | 60 mA | 38 mA |


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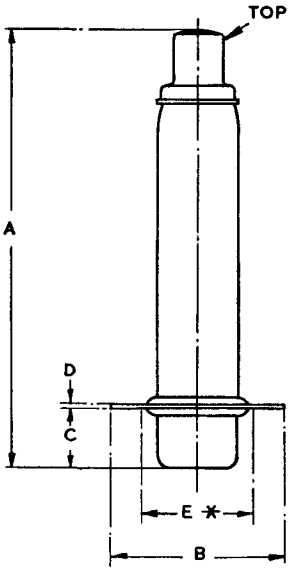


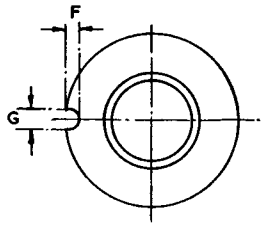


CONNECTIONS
DISC. ELEMENT
T.C. ELEMENT

| DIM. | MILLIMETRES | INCHES |
|---|---|---|
| A | 49·2 ± 4·8 | $1\,^{15}/_{16} \pm {}^{3}/_{16}$ |
| B | 22·23 ± 0·20 | 0·875 ± 0·008 |
| C | 6·0 MIN. | 0·24 MIN. |
| | 8·5 MAX. | 0·33 MAX. |
| D | 0·30 MAX. | 0·012 MAX. |
| * E | 15·87 MIN. | 0 625 MIN. |
| F | 1·57 $^{+0.13}_{-0.00}$ | 0·062 $^{+0.005}_{-0.000}$ |
| G | 2·36 $^{+0.13}_{-0.00}$ | 0·093 $^{+0.005}_{-0.000}$ |

NOTE:– BASIC FIGURES ARE INCHES.
* DENOTES:– MIN CLAMPING DIAMETER