ELECTROMETER PENTODE
SUBMINIATURE TYPE

FOR
SINGLE STAGE AND MULTI-STAGE
CIRCUIT APPLICATIONS

ANY MOUNTING POSITION

BOTTOM VIEW
LEADS 5 & 6 ARE OMITTED
LEADS 0.048"
CENTER-TO-CENTER

THE 5886 IS A FILAMENTARY TYPE PENTODE IN THE 5 PIN SUBMINIATURE CONSTRUCTION, OPERATED AS A TRIODE, THE TUBE HAS AN UNUSUALLY HIGH RATIO OF TRANSCONDUCTANCE TO CONTROL GRID CURRENT FOR SINGLE STAGE CIRCUITS. AS A PENTODE, THE AMPLIFICATION FACTOR IS HIGH ENOUGH TO AFFORD CONSIDERABLE VOLTAGE GAIN IN THE ELECTROMETER STAGE OF A MULTI-STAGE CIRCUIT.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID 1 TO ALL 2.2 pF
GRID 1 TO GRID 2 AND PLATE 2.0 pF

FILAMENT CHARACTERISTICS AND RATINGS

ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS 1.25 VOLTS 10 MA.
LIMITS OF APPLIED VOLTAGE 1.25±0.25 VOLTS
FOR USE WITH BATTERIES HAVING AN INITIAL VOLTAGE OF 1.55 VOLTS MAX.

MAXIMUM RATINGS
ABSOLUTE MAXIMUM VALUES - SEE EIA STANDARD RS-239

PLATE VOLTAGE 22.5 VOLTS
GRID 2 VOLTAGE 22.5 VOLTS
TOTAL CATHODE CURRENT 300 μA

TYPICAL OPERATING CHARACTERISTICS

TRIODE PENTODE

PLATE VOLTAGE 10.5 8.5 VOLTS
GRID 2 VOLTAGE ----- 4.5 VOLTS
GRID 1 VOLTAGE -3 -2 VOLTS
PLATE CURRENT 200 6 μA
GRID 2 CURRENT ----- 3.6 μA
AMPLIFICATION FACTOR 1.8 ----
TRANS CONDUCTANCE 175 14 μMHO
PLATE RESISTANCE ----- 8 MΩ
MAX. GRID 1 CURRENT 2.5×10^-13 ---- AMP.
NOMINAL GRID 1 CURRENT 3×10^-15 AMP.

GRID 2 CONNECTED TO PLATE
TRIODE CONNECTED
(Grid #2 Tied To Plate)

$E_f = 1.25 \text{ Volts}$
$E_{C2} = 4.5 \text{ Volts}$

PENTODE

TRANSFER CHARACTERISTICS

$E_f = 1.25 \text{ Volts}$
$E_{C2} = 4.5 \text{ Volts}$
$E_p = 12 \text{ Volts}$
TRIODE CONNECTED
Grid #2 Tied to Plate
$E_f = 1.25$ Volts

TRANSFER CHARACTERISTICS
TRIODE CONNECTED
$E_f = 1.25$ Volts
$E_b = 10.5$ Volts
TRANSFER CHARACTERISTICS
TRIODE CONNECTED

$E_r = 1.25 \text{ Volts}$
$E_b = \quad 6 \text{ Volts}$