

Instruction Manual

No. 9-106 Rev. 6

MINIATURE ION TUBE, GIC-028-2, -028-3, -028-4

DESCRIPTION

This Bayard-Alpert type tube has a pressure range of 10^{-3} to 2×10^{-10} Torr. It is a direct-degas tube permitting pressure indication during degas. It can be used with most control circuits. Its features include:

1. Two oxide-coated iridium filaments to resist burnout. Both are spring mounted to prevent warping.
2. Non-sag grid of tungsten alloy degassed by passing current through it at low voltage. This permits pressure indication during degas.
3. Hard glass envelope and Con-X stainless steel flange for bakeout at temperatures to 450°C .

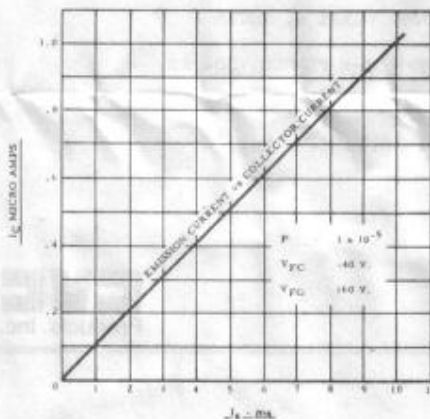
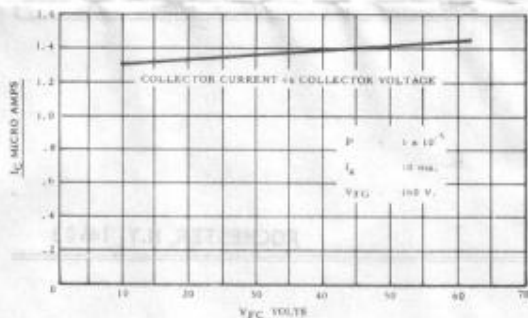
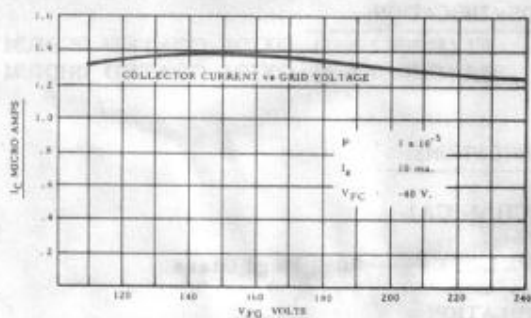
INSTALLATION NOTE: REMOVE THE PLASTIC SLEEVE FROM INSIDE THE TUBE BEFORE INSTALLING!

ELECTRICAL SPECIFICATIONS

Collector Voltage (V_{FC})	--	-25 to -60 volts
Grid Voltage (V_{FG})	-----	150 to 250 volts
Filament Voltage (V_F)	-----	3 to 6 volts ac or dc
Emission Current	-----	8.7 milliamperes
Filament Current	-----	2.5 amperes (approximately)
Degas Power	-----	7.5 volts ac or dc at approximately 4.5 amperes

MISCELLANEOUS SPECIFICATIONS

Pressure Range	----	10^{-3} to 2×10^{-10} Torr
X-Ray Limit	-----	Approx. 2×10^{-10} Torr
Sensitivity (Air)	--	100 micro-amperes per millitorr at rated emission

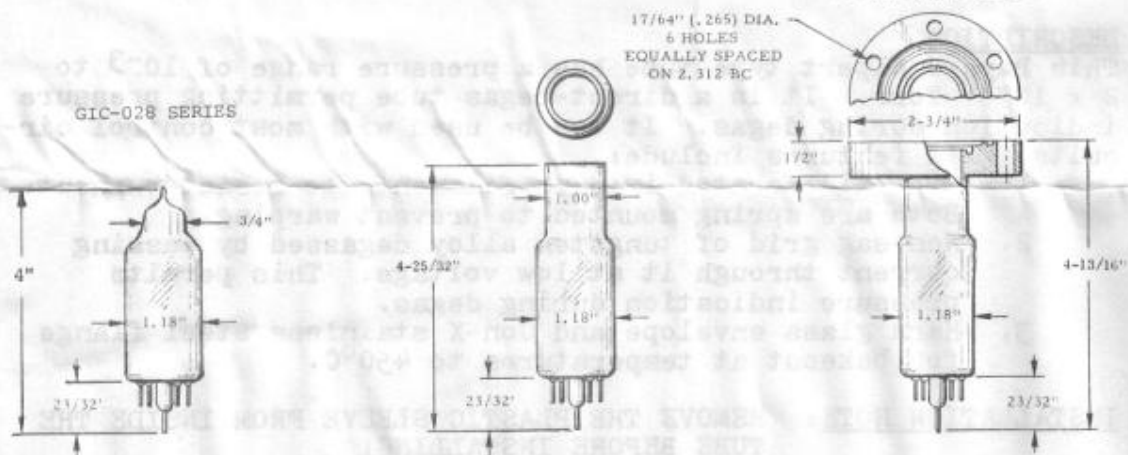


Instruction Manual

INSTRUCTION MANUAL

No. 9-108 Rev. 6

4-890- J-850- S-850-2, GIC-028-2, GIC-028-3, GIC-028-4



#5507491
PUMPED AND
SEALED IN 10^{-5} TORR
RANGE (FOR GIC
-300A CONTROLLER TEST)

TYPE GIC-028-2 (7052 GLASS)
GIC-028-3 (WITH 1" KOVAR
TUBULATION)

TYPE GIC-028-4 WITH
CON-X FLANGE



TYPICAL TUBE BASE

PIN IDENTIFICATION:

- F1 (PINS 2 & 3) OXIDE COATED IRIIDIUM
- F2 (PINS 7 & 8) OXIDE COATED IRIIDIUM

SPECIFICATIONS:

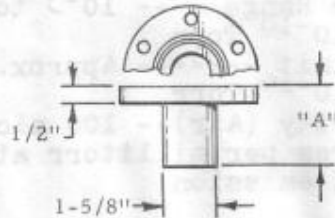
MECHANICAL

ENVELOPE — 7052 Hard Glass
Pyrex

TUBULATION

- 1" OD 7052 GLASS &, KOVAR
- 2-3/4" OD CON-X FLANGE, 304 SS.

MATING ADAPTER FLANGE:



MATING ADAPTER PART NO. 270997-"A"	
DASH # "A"	CHARTED LENGTH
-1	1-3/16"
-2	2-11/16"
-3	1-1/16"

MOUNTING POSITION - Any.



Products, Inc.

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