



GENERAL DESCRIPTION

Itrontm DG-19 numerical indicator tubes provide a highly efficient display of digits and characters at extremely low operating voltages. These single-plane tube read-outs offer low power consumption with rugged construction, and an exceptionally wide viewing angle with unsurpassed brightness and clarity.

The numerical figures, mathematical symbols and characters are composed of highly efficient green phosphor-coated segments, energized by electrons emitted from a direct heated super fine cathode. Particularly suited to decimally coded applications such as basic counters and computer circuits, Itrontm DG-19 indication tubes display decimal points, prime, and numerical figures "0" through "9".

- Uni-Plane Design
- Sharp, Bright Green Characters
- Low Voltage
- Low Power Consumption

ELECTRICAL CHARACTERISTICS

Cathode	Direct heating
Heater current	95 mA
Heater voltage at 95mA 95mA	1.6 Volts ±10%
Color of figures	Green
Brightness	80 Foot-lamberts

ABSOLUTE MAXIMUM RATINGS

Pulse Voltage Upon	} Max. 30 Volts Min. -30 Volts
Screen and Control Grids	
Maximum voltage, phosphor segments	27 Volts
Minimum voltage, phosphor segments	-27 Volts
Maximum screen grid (control grid)	25 20 Volts
Minimum screen grid (control grid)	-27 Volts
Maximum heater current	100 mA
Maximum Pulse Voltage upon phosphor segments	50 Volts
(This is based on aging performed at 50 volts)	

AVERAGE RATINGS

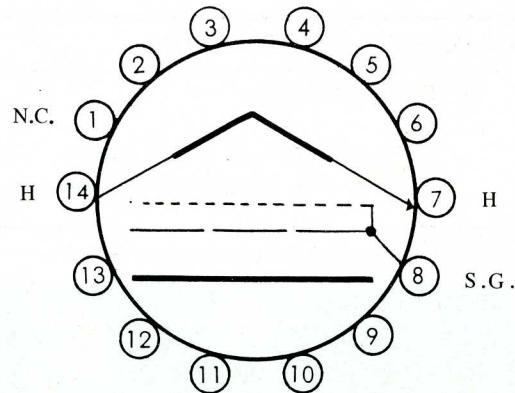
Cathode current (at 25 Volts of phosphor segment and grid voltage)	10 mA
Numerical phosphor segments current	1 mA
Current to each symbol, "1" and "0"	0.2 mA
Ambient temperature	-40 to +50 70 °C

TYPICAL OPERATION

Voltage, phosphor segments	25 Volts
Screen grid (control grid)	20 10 Volts
Screen grid cut off voltage	-4 Volts
Phosphor segments cut off voltage	0 Volts



(actual size)



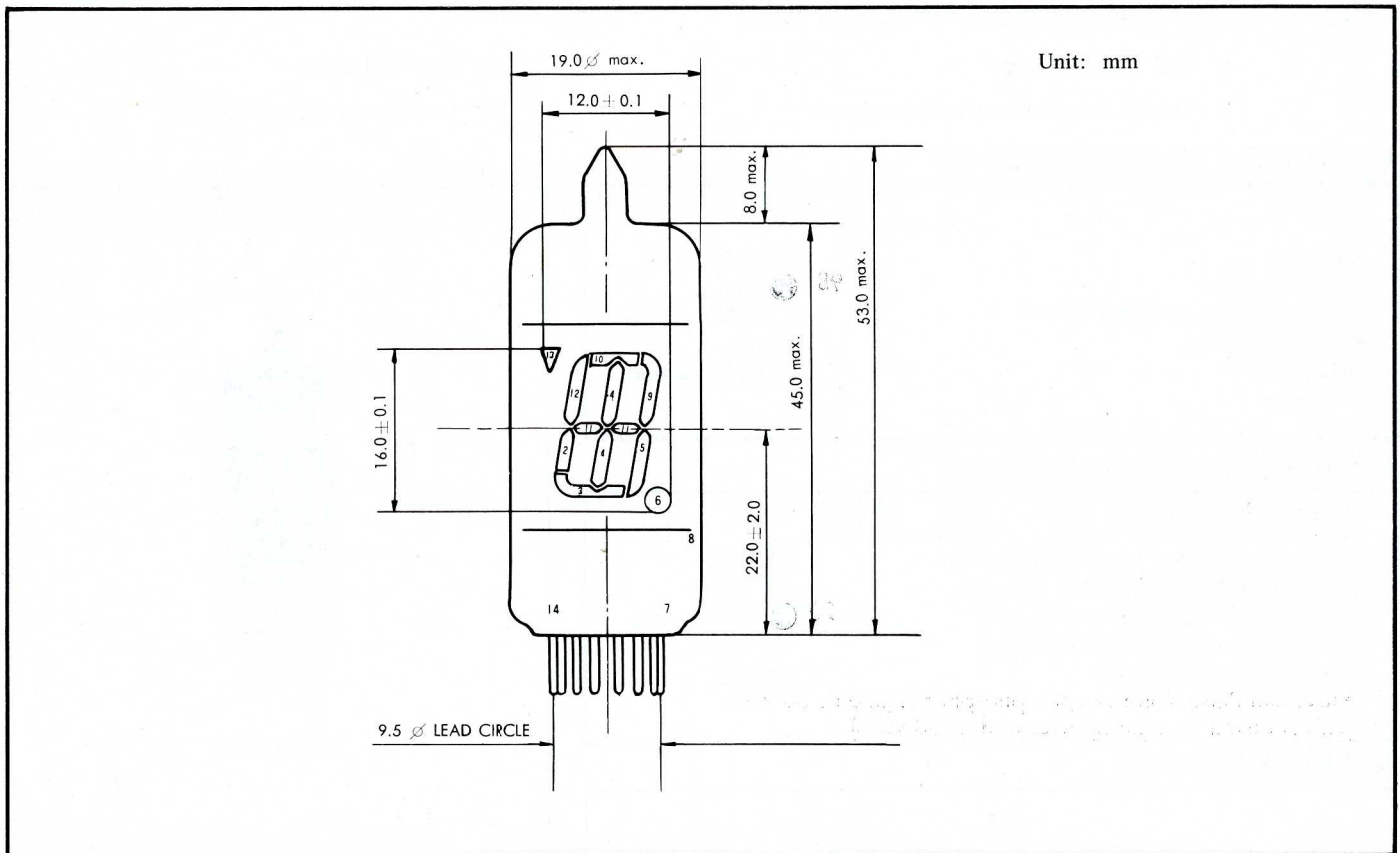
BOTTOM VIEW

MECHANICAL DESIGN

EXTERNAL DIMENSIONS		CHARACTER DIMENSIONS	
Overall Length	53mm	Numerals	Height: 14.0mm, Width: 9.8mm
Diameter of glass tube	19mm	Decimal point	Diameter: 2.0mm
Maximum viewing angle	120 degree	Prime	Height: 3.5mm, Width: 1.6mm
Net weight	10.0 gr		
Mounting position	Optional		
Base	cf. drawings		

CHARACTER OUTLINES (actual size)

OUTLINE DRAWING



ORDERING INFORMATION:

DC-19A (PIN TYPE)

For installation in 14 pin socket. Pin diameter 0.6mm. Pin length 6.5 ± 0.5 mm.

DC-19B (WIRE TYPE)

For installation directly on printed circuit board. Wire diameter 0.5mm. Wire length 40 ± 2 mm.

For further information and prices, please contact:

Exclusive U.S. Distributor

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