



ELECTRONIC
INNOVATIONS
IN ACTION

DISPLAY DEVICES

Low Voltage Indicator Tube

Y-1938

TENTATIVE SPECIFICATION SHEET

The Y-1938 is a low voltage seven bar segment vacuum cathodoluminescent readout tube which provides bright, sharp display of alphanumeric symbols at low drive and power levels. Symbols are displayed in type Y-1938 by excitation of phosphor-screened segments, which are energized by electrons emitted by a directly heated common cathode.

LOW POWER - Typical operation for high brightness is 25 volts for anode and 1.5 Vac or Vdc at 42 mA for the cathode.

FAST SPEED - Operates in the very high speed range through the use of low presistence phosphor.

BRIGHTNESS - Displays a highly visible blue-green color approximately 200 foot-lamberts.

WIDE ANGLE VIEWING - Single plane character formation with no parallax problems and up to 150° viewing range.

RELIABILITY - Long life construction that uses a single plane and thick film technology combined with the low total power requirements of less than 200 milliwatts.

CHARACTER SIMPLIFICATION - Only one type to display digits (0-9), letters - A, C, E, F, G, H, I, J, L, O, P, S, U, Y.

COMPACT SIZE - Standard miniature T6½ bulb, two inches maximum height for minimum space requirements.

TYPICAL SPECIFICATIONS

ELECTRICAL

Filament Voltage	1.5	Vac or Vdc
Filament Current	42	mA
Filament Heating Power	72	mW
Anode Excitation Voltage (Max.)	55	Vdc
Anode Excitation Voltage (Typical)	25	Vdc
Anode Current/Segment at 25 Volts	550	µa
Maximum Total Anode Power Dissipation at 25 Volts	100	mW

OPTICAL

Light Output (at 25 Vdc Anode Voltage)	200	F-L
Character Dimension		
Height	0.570	Inch
Width	0.360	Inch
Character Color	Blue Green	
Phosphor	P15	
Viewing Angle	Single-Plane	
Character Orientation	Parallel to Plane through Pins 3 & 7	

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