



*Excellence in Electronics*

# CK3BAP7/ QK545

## GENERAL DESCRIPTION

The CK3BAP7/QK545 is a cathode ray tube which is used as a simulator for CK6835. This tube may be utilized for visual inspection of the input signal and for determining the focus and deflection capabilities of the circuitry.

## GENERAL CHARACTERISTICS

### ELECTRICAL

|   |             |
|---|-------------|
| Phosphor . . . . .                              | P7          |
| Heater  |             |
| Heater Voltage . . . . .                        | 6.3 V ± 10% |
| Heater Current . . . . .                        | 0.6 A       |
| Maximum Ratings                                 |             |
| Anode Voltage . . . . .                         | 6000 Vdc    |
| Grid #1 (control electrode) Voltage             |             |
| Negative Bias . . . . .                         | -125 Vdc    |
| Positive Bias . . . . .                         | 0 Vdc       |
| Positive Peak Value . . . . .                   | +2 V        |
| Typical Operation Conditions                    |             |
| (All Voltages Measured with Respect to Cathode) |             |
| Anode Voltage . . . . .                         | 3500 Vdc    |
| Cathode Current . . . . .                       | 100 μa      |

### MECHANICAL CHARACTERISTICS

#### Terminal Connections:

|                                     |                      |
|-------------------------------------|----------------------|
| Pin 1 Heater . . . . .              | Pin 7 no connection  |
| Pin 2 Grid #1 . . . . .             | Pin 8 no connection  |
| Pin 3 no connection . . . . .       | Pin 9 no connection  |
| Pin 4 no connection . . . . .       | Pin 10 no connection |
| Pin 5 no connection . . . . .       | Pin 11 Cathode       |
| Pin 6 Anode . . . . .               | Pin 12 Heater        |
| Focusing . . . . . Magnetic         |                      |
| Deflection . . . . . Magnetic       |                      |
| Maximum Deflection Angle . . . . .  | 20°                  |
| Over-all Length . . . . .           | 13-3/4"              |
| Bulb Diameter . . . . .             | 3" Nominal           |
| Neck Diameter . . . . .             | 1-1/2" Maximum       |
| Screen Diameter (approx.) . . . . . | 1-3/4"               |
| Base . . . . .                      | Small Shell Duodecal |
| Mounting Position . . . . .         | Any                  |

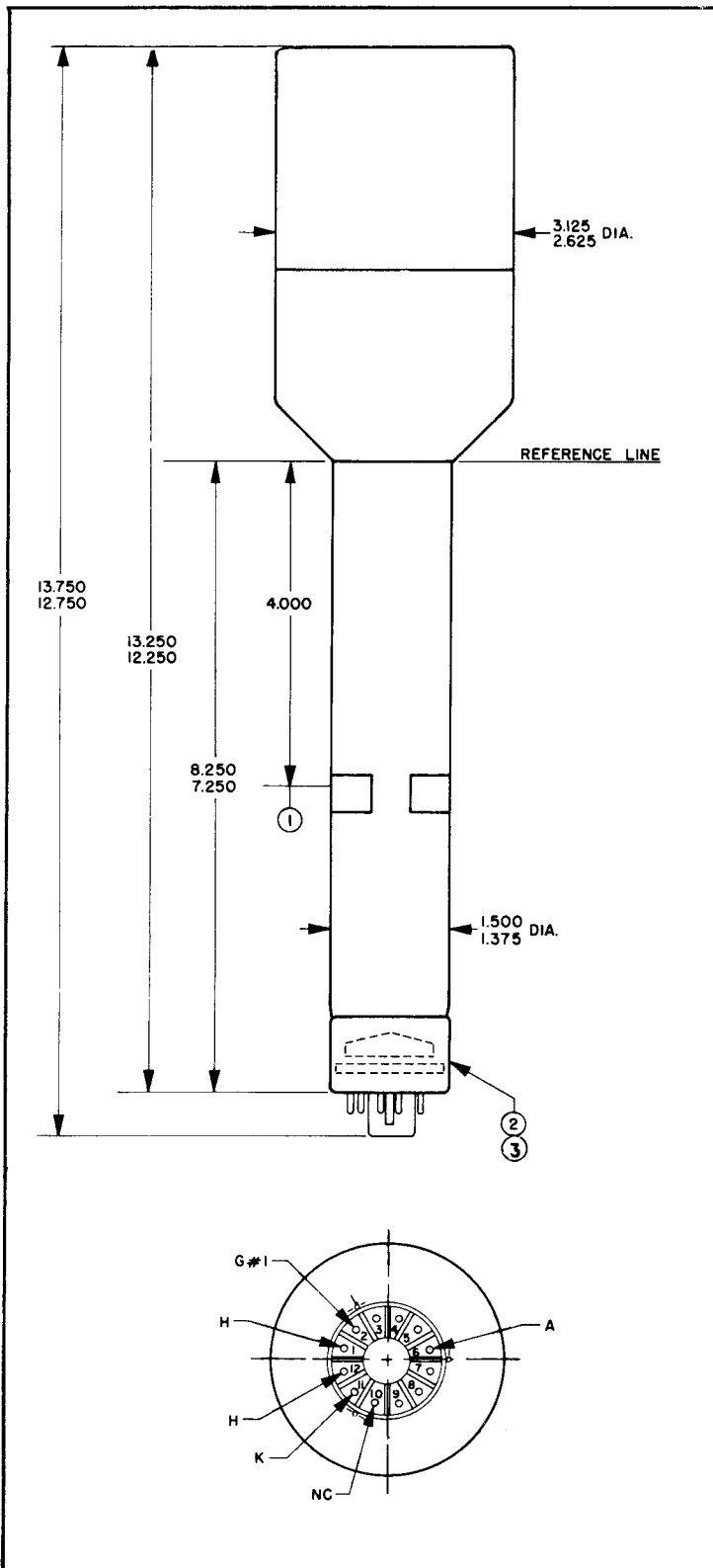


STORAGE  
TUBE  
SIMULATOR

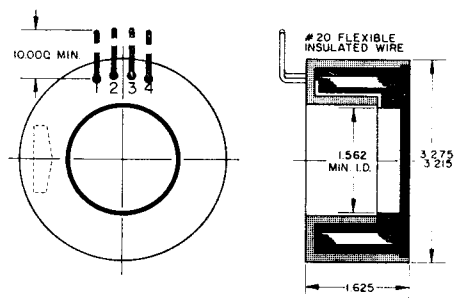


STORAGE TUBE SIMULATOR

- 1) LOCATION OF DEFLECTION YOKE AND FOCUSING COIL MUST BE WITHIN THIS SPACE.
- 2) SOCKET FOR THIS BASE SHOULD NOT BE RIGIDLY MOUNTED; IT SHOULD HAVE FLEXIBLE LEADS AND BE ALLOWED TO MOVE FREELY. BOTTOM CIRCUMFERENCE OF BASE SHELL WILL FALL WITHIN A CIRCLE CONCENTRIC WITH CONE AXIS AND HAVING A DIAMETER OF 2.000.
- 3) B12-43 12 PIN BASE.



BM-411 FOCUS COIL



|         |  |
|---------|--|
| LEADS   | ————— TICKLER COIL —————                 |
| #1 - S1 | RESISTANCE - 35 TO 50 OHMS (AT 20°C)     |
| #2 - F1 | MAX. CURRENT - 30 mA RMS                 |
|         | VOLTAGE RATING - 250 V.                  |
|         | INDUCTANCE - 45 MILLIHENRIES APPROX.     |
| #3 - S2 | ————— FOCUS COIL —————                   |
| #4 - F2 | RESISTANCE - 6500 TO 9000 OHMS (AT 20°C) |
|         | MAX. CURRENT - 25 mAdc                   |
|         | VOLTAGE RATING - 250 V.                  |

- NOTES:
- 1) - FOR USE WITH RECORDING STORAGE TUBES AND SIMULATORS
  - 2) - TICKLER COIL IS PROVIDED TO PERMIT COMPENSATING FOR IMPROPER FOCUS AT THE EDGES OF A PATTERN CAUSED BY THE VARIATION IN DISTANCE FROM THE CENTER OF DEFLECTION TO a) THE CENTER OF A STORAGE AREA OF A STORAGE TUBE, AND b) THE PERIPHERY OF A STORAGE AREA THIS TICKLER COIL USEFUL ONLY FOR SLOW SCANNING SPEEDS.
  - 3) - WHEN NOT REQUIRED, THE TICKLER COIL MAY BE LEFT UNCONNECTED.
  - 4) - SHELL MATERIAL - ANNEALED SWEDISH IRON OR EQUIVALENT

INDUSTRIAL TUBE DIVISION

RAYTHEON COMPANY