FILLED-RIM TYPE

110° MAGNETIC DEFLECTION

Direct Interelectrode Capacitances
Cathode to all other electrodes ... 5 pF
Grid No.1 to all other electrodes ... 6 pF
External conductive coating to anode ... 1700 min—2500 max pF
Heater Current at 6.3 V ... 600 ± 30 mA
Heater Warm-Up Time (Average) ... 11 s
Electron Gun ... Type Requiring No Ion-Trap Magnet

OPTICAL
Phosphor ... P4—Sulfide Type, Aluminized
Faceplate ... Filterglass
Light transmission at center (Approx.) ... 42%

MECHANICAL
Weight (Approx.) ... 29 lb
Overall Length ... 14.875 ± .281 in
Neck Length ... 5.125 ± .125 in
Projected Area of Screen ... 282 sq in
External Conductive Coating
Type (see CRT OUTLINES 1 at front of this section) ... Regular-Band
Contact area for grounding ... Near Reference Line
Cap ... Recessed Small Cavity (JEDEC No.J1-21)
Base ... Small-Button Neogeightar 7-Pin, Arrangement 1, (JEDEC No.B7-208)

TERMINAL DIAGRAM (Bottom View)

Pin 1—Heater
Pin 2—Grid No.1
Pin 3—Grid No.2
Pin 4—Grid No.4
Pin 6—Grid No.1
Pin 7—Cathode
Pin 8—Heater
Cap—Anode
(Grid No.3
Grid No.5,
Screen,
Collector)
C—External
Conductive
Coating

MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES
Voltages are positive with respect to cathode
Anode Voltage ... 11000 min—23000 max V
Grid-No.4 Voltage
Positive value ... 1100 max V
Negative value ... 550 max V
Grid-No.2 Voltage ... 200 min—550 max V
Grid-No.1 Voltage
Negative peak value ... 220 max V
Negative bias value ... 155 max V
Positive bias value ... 0 max V
Positive peak value ... 2 max V
Heater Voltage ... 5.7 min—6.9 max V

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Peak Heater-Cathode Voltage
Heater negative with respect to cathode:
During equipment warm-up period ≤ 15 s........ 450 max V
After equipment warm-up period............... 300 max V
Heater positive with respect to cathode:
Combined AC & DC voltage....................... 200 max V
DC component................................ 100 max V

TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE
Voltages are positive with respect to grid No.1
Anode Voltage............................ 18000 V
Grid-No.4 Voltage..................... 0 to 400 V
Grid-No.2 Voltage..................... 300 V
Cathode Voltage........................ 28 to 62 V
For visual extinction of focused raster
Field Strength............................. 0 to 12 G
Of required adjustable centering magnet

MAXIMUM CIRCUIT VALUE
Grid-No.1 Circuit Resistance............... 1.5 max MΩ

* Includes implosion protection hardware.

DIMENSIONAL OUTLINE
(Bulb J187 K)

DIMENSIONS IN INCHES

MINIMUM SCREEN
DIAGONAL 22.312
GREATEST WIDTH 19.250
GREATEST HEIGHT 15.125

SHELL OPENING 19.939 MIN.

BASE JEDEC NO. 87-208

CAVITY CAP JEDEC NO.JI-21

SHELL OPENING 15.814 MIN.

REFERENCE LINE DETERMINED BY GAUGE JEDEC NO. G-126 92CS-14561

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