



# PERMANENT SENSITIVITY, RADIATION COUNTER TUBES □

| TYPE NO.             | Filling                     | Operating Voltage     | Plateau                | Slope Plateau               | Dead Time (Approx.) | Background (Shielded 2" Lead) |
|----------------------|-----------------------------|-----------------------|------------------------|-----------------------------|---------------------|-------------------------------|
| 75N-7 <sup>†</sup>   | Neon + quenching admixture  | 700 D.C. <sup>†</sup> | in excess of 125 volts | 15% per 100 volts max.      | 100 micro-seconds   | 50 counts per minute max.     |
| 75NB3-7 <sup>†</sup> | Neon + quenching admixture  | 700 D.C. <sup>†</sup> | in excess of 125 volts | 15% per 100 volts max.      | 100 micro-seconds   | 50 counts per minute max.     |
| 90NB                 | Neon + quenching admixture  | 900 D.C.              | in excess of 200 volts | 10% per 100 volts max.      | 100 micro-seconds   | 50 counts per minute max.     |
| 100C                 | Argon + quenching admixture | 1200 D.C.             | in excess of 300 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 100CB                | Argon + quenching admixture | 1200 D.C.             | in excess of 300 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 100N                 | Neon + quenching admixture  | 700 D.C.              | in excess of 200 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 100NB                | Neon + quenching admixture  | 700 D.C.              | in excess of 200 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 120C                 | Argon + quenching admixture | 1200 D.C.             | in excess of 300 volts | 5% to 10% per 100 volts     | 300 micro-seconds   | 100 counts per minute max.    |
| 120N                 | Neon + quenching admixture  | 700 D.C.              | in excess of 200 volts | 5% to 10% per 100 volts     | 300 micro-seconds   | 100 counts per minute max.    |
| 120NB                | Neon + quenching admixture  | 700 D.C.              | in excess of 200 volts | 5% to 10% per 100 volts     | 300 micro-seconds   | 100 counts per minute max.    |
| 150N                 | Neon + quenching admixture  | 700 D.C.              | in excess of 180 volts | 10% per 100 volts max.      | 150 micro-seconds   | 75 counts per minute max.     |
| 150NB                | Neon + quenching admixture  | 700 D.C.              | in excess of 180 volts | 10% per 100 volts max.      | 150 micro-seconds   | 75 counts per minute max.     |
| 153C                 | Argon + quenching admixture | 1500 D.C.             | in excess of 400 volts | 3% to 8% per 100 volts      | 150 micro-seconds   | 60 counts per minute max.     |
| 200C                 | Argon + quenching admixture | 1200 D.C.             | in excess of 300 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 200CB                | Argon + quenching admixture | 1200 D.C.             | in excess of 300 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 200N                 | Neon + quenching admixture  | 700 D.C.              | in excess of 200 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 200NB                | Neon + quenching admixture  | 700 D.C.              | in excess of 200 volts | 5% to 10% per 100 volts     | 200 micro-seconds   | 50 counts per minute max.     |
| 230N                 | Neon + quenching admixture  | 850 D.C.              | in excess of 150 volts | Less than 15% per 100 volts | 100 micro-seconds   | 15 counts per minute max.     |
| 240C                 | Neon + quenching admixture  | 1200 D.C.             | in excess of 200 volts | Less than 10% per 100 volts | 100 micro-seconds   | 50 counts per minute max.     |
| 240N                 | Neon + quenching admixture  | 850-900 D.C.          | in excess of 150 volts | Less than 15% per 100 volts | 100 micro-seconds   | 50 counts per minute max.     |
| 912NB*               | Neon + quenching admixture  | 900 D.C.              | in excess of 200 volts | 10% per 100 volts max.      | 100 micro-seconds   | 75 counts per minute max.     |

NOTE: All cathodes are stainless steel.  
Life expectancy unlimited by use.  
Operating temperature range, -55°C to +75°C.

| Average Mica Window<br>or Wall Thickness              | Effective<br>Dia. of<br>Mica Window | Effective<br>Cathode Dimensions<br>(Inches) | Max. Overall<br>Tube Dimensions<br>(Inches) | Application                   | TYPE NO.             |
|-------------------------------------------------------|-------------------------------------|---------------------------------------------|---------------------------------------------|-------------------------------|----------------------|
| 150 mg/cm <sup>2</sup>                                | —                                   | 2-11/16 long x 5/8 O.D.<br>x .009" Wall     | 5/8 x 4-3/8                                 | Gamma                         | 75N-7 <sup>†</sup>   |
| 150 mg/cm <sup>2</sup>                                | —                                   | 2-11/16 long x 5/8 O.D.<br>x .009" Wall     | 5/8 x 4-5/16<br>(3 Pin Base)                | Gamma                         | 75NB3-7 <sup>†</sup> |
| 30-40 mg/cm <sup>2</sup>                              | —                                   | 3 long x 5/8 O.D.                           | 5/8 O.D. x 5-5/8<br>(3 Pin Base)            | Beta & Gamma                  | 90NB                 |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-1/2 x 3-3/4                               | Beta & X-Ray                  | 100C                 |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-3/8 x 4-11/32<br>(4 Pin Base)             | Beta & X-Ray                  | 100CB                |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-1/2 x 3-3/4                               | Beta                          | 100N                 |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-3/8 x 4-11/32<br>(4 Pin Base)             | Beta                          | 100NB                |
| .0008 in. =<br>5.6 mg/cm <sup>2</sup> = 20.32 microns | 1-29/32"                            | 2-11/16 lg. x 2 O.D.<br>x 5/64 Wall         | 2-3/8 x 5-1/8                               | Beta & X-Ray                  | 120C                 |
| .0008 in. =<br>5.6 mg/cm <sup>2</sup> = 20.32 microns | 1-29/32"                            | 2-11/16 lg. x 2 O.D.<br>x 5/64 Wall         | 2-3/8 x 5-1/8                               | Beta                          | 120N                 |
| .0008 in. =<br>5.6 mg/cm <sup>2</sup> = 20.32 microns | 1-29/32"                            | 2-11/16 lg. x 2 O.D.<br>x 5/64 Wall         | 2-5/16 x 5-3/4<br>(4 Pin Base)              | Beta                          | 120NB                |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 25/32"                              | 4 lg. x 7/8 O.D.<br>x 3/64 Wall             | 1 x 6-5/8<br>(4 Pin Base)                   | Beta & Gamma                  | 150N                 |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 25/32"                              | 4 lg. x 7/8 O.D.<br>x 3/64 Wall             | 1-5/32 x 7-1/8                              | Beta & Gamma                  | 150NB                |
| .0005 in. =<br>3.5 mg/cm <sup>2</sup> = 12.70 microns | 25/32"                              | 4-3/8 lg. x 7/8 O.D.                        | 1 O.D. x 6 lg.                              | X-Ray                         | 153C                 |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-1/2 x 3-3/4                               | Alpha, Beta,<br>Gamma & X-Ray | 200C                 |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-3/8 x 4-11/32<br>(4 Pin Base)             | Alpha, Beta,<br>Gamma & X-Ray | 200CB                |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-1/2 x 3-3/4                               | Alpha & Beta                  | 200N                 |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 1-3/32"                             | 1-1/2 lg. x 1-3/16 O.D.<br>x 3/32 Wall      | 1-3/8 x 4-11/32<br>(4 Pin Base)             | Alpha & Beta                  | 200NB                |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 13/32"                              | 1-1/4 lg. x 5/8 O.D.<br>x .010" Wall        | 5/8 x 3-1/4<br>(3 Pin Base)                 | Alpha & Beta                  | 230N                 |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 13/32"                              | 4 lg. x 5/8 O.D.<br>x .010" Wall            | 5/8 x 5-7/8<br>(3 Pin Base)                 | Alpha, Beta<br>& Gamma        | 240C                 |
| .0002 in. =<br>1.4 mg/cm <sup>2</sup> = 5.08 microns  | 13/32"                              | 4 lg. x 5/8 O.D.<br>x .010" Wall            | 5/8 x 5-7/8<br>(3 Pin Base)                 | X-Ray                         | 240N                 |
| 30-40 mg/cm <sup>2</sup>                              | —                                   | 7 lg. x 5/8 O.D.                            | 5/8 O.D. x 11-25/32<br>(4 Pin Base)         | Beta & Gamma                  | 912NB*               |

<sup>†</sup>Also available in 600 volt operating voltage. Specify Type 75N-6 or 75NB3-6. For 900 volt operation, specify Type 75N-9 or 75NB3-9.

☐ Detailed catalogue available upon request.

\*Also available with 3 Pin Base, specify Type 912NB-3. Overall tube length = 11-3/8".