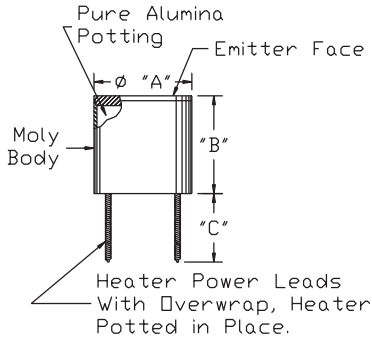


TB-198

Standard Series Barium Tungsten Dispenser Cathodes

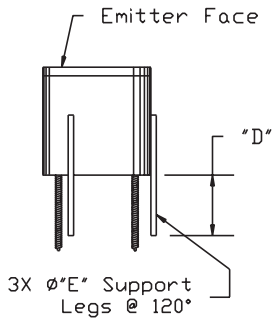
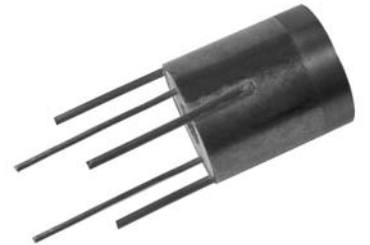
Standard Series Dispenser Cathodes

- 950-1200°C operation
- Type 311 (532, 411, 612, M, Scandate by request)
- 3-5A/cm² CW emission
- >15A/cm² Pulsed emission
- Al₂O₃ Insulation, molybdenum body
- >>10,000 hours under ideal conditions
- Both power leads electrically isolated from the outer body
- Non Gassy
- Available from stock
- See below for the same units with support legs
- Os/Ru (M Type), Os/W, Ir emission enhancing coatings available



Standard Series Cathodes With Support Legs

- Same as the standard series cathodes but with added "tripod" support legs.
- Excellent stability and thermal isolation
- Beam current can go thru legs



| Part # w/out Legs | Part # w/Legs | Prev. Ref. | "A" | "B" | "C" | "D" | "E" |
|-------------------|---------------|------------|-------|-------|------|------|---------|
| 101100 | 101101 | STD 134 | .134 | .285 | .35 | .50 | .015 Re |
| 101102 | 101103 | STD 200 | .200 | .300 | .35 | .50 | .015 Re |
| 101104 | 101105 | STD 250 | .250 | .350 | .35 | .50 | .015 Re |
| 101106 | 101107 | STD 300 | .300 | .400 | .35 | .50 | .015 Re |
| 101108 | 101109 | STD 400 | .400 | .450 | .35 | .50 | .015 Re |
| 101110 | 101111 | STD 500 | .500 | .500 | .35 | .50 | .025 Re |
| 101112 | 101113 | STD 600 | .600 | .600 | .50 | .50 | .025 Re |
| 101114 | 101115 | STD 750 | .750 | .750 | .75 | .50 | .040 Re |
| 101116 | 101117 | STD 1000 | 1.000 | 1.000 | 1.00 | 1.50 | .040 Re |

| Part # w/out Legs | Part # w/Legs | Prev. Ref. | 900 deg. C | | | 1000 deg. C | | | 1100 deg. C | | | 1200 deg. C | | | |
|-------------------|---------------|------------|------------|-------|-------|-------------|-------|--------|-------------|-------|--------|-------------|-------|--------|------|
| | | | Volts | Amps | Watts | Volts | Amps | Watts | Volts | Amps | Watts | Volts | Amps | Watts | Ohms |
| 101100 | 101101 | STD 134 | 2.90 | 0.90 | 2.60 | 3.70 | 1.00 | 3.70 | 4.70 | 1.10 | 5.20 | 5.80 | 1.30 | 7.50 | 4.40 |
| 101102 | 101103 | STD 200 | 3.50 | 0.86 | 3.00 | 4.80 | 1.25 | 6.00 | 6.20 | 1.37 | 8.50 | 7.50 | 1.53 | 11.50 | 4.90 |
| 101104 | 101105 | STD 250 | 3.30 | 1.36 | 4.50 | 4.80 | 1.67 | 8.00 | 6.30 | 1.83 | 11.50 | 7.60 | 1.97 | 15.00 | 3.90 |
| 101106 | 101107 | STD 300 | 4.80 | 1.46 | 7.00 | 6.50 | 1.69 | 11.00 | 8.20 | 1.89 | 15.50 | 9.80 | 2.04 | 20.00 | 4.80 |
| 101108 | 101109 | STD 400 | 4.00 | 2.75 | 11.00 | 5.60 | 3.39 | 19.00 | 7.20 | 3.75 | 27.00 | 8.60 | 4.07 | 35.00 | 2.10 |
| 101110 | 101111 | STD 500 | 5.00 | 4.00 | 20.00 | 7.00 | 4.57 | 32.00 | 8.40 | 5.24 | 44.00 | 10.20 | 5.39 | 55.00 | 1.90 |
| 101112 | 101113 | STD 600 | 3.90 | 7.70 | 30.00 | 4.70 | 9.57 | 45.00 | 5.80 | 11.20 | 65.00 | 7.00 | 12.86 | 90.00 | 0.50 |
| 101114 | 101115 | STD 750 | 5.00 | 8.00 | 40.00 | 6.70 | 9.55 | 64.00 | 8.80 | 11.10 | 98.00 | 10.50 | 12.57 | 132.00 | 0.80 |
| 101116 | 101117 | STD 1000 | 6.40 | 10.50 | 67.00 | 8.70 | 12.30 | 107.00 | 11.00 | 14.00 | 154.00 | 13.50 | 14.80 | 200.00 | 0.90 |

Note: V, I, T data is taken with bare cathode in 1x10⁻⁶ Torr. AC operation is preferred, DC is acceptable. Consult factory for details.