

TECHNICAL DATA NATIONAL ELECTRONICS READOUT TUBES

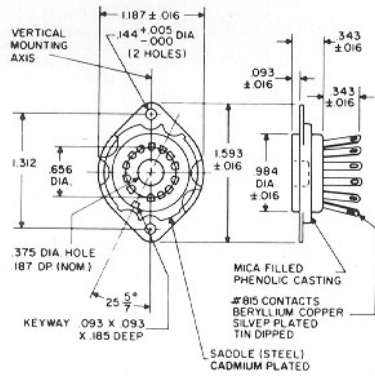
SIDEVIEWING

*NUMERALS 0 thru 9 SYMBOLS + and -	NL-7037	NL-807	NL-803 NL-811	NL-812	NL-5030																																																																																																																																		
CHARACTER SIZE																																																																																																																																							
ELECTRICAL RATINGS AND CHARACTERISTICS																																																																																																																																							
Ionization Voltage (Maximum)	200 Vdc	170 Vdc	170 Vdc	170 Vdc	160 Vdc																																																																																																																																		
Supply Voltage (Minimum)	200 Vdc	170 Vdc	170 Vdc	170 Vdc	160 Vdc																																																																																																																																		
Cathode Current — Peak (Max.)	10 ma	5.0 ma	3.5 ma	3.5 ma	4.0 ma																																																																																																																																		
Average (Max.)	10 ma	4.5 ma	3.0 ma	† 3.0 ma	4.0 ma																																																																																																																																		
Average (Min.)	6 ma	2.0 ma	1.5 ma	† 1.5 ma	2.0 ma																																																																																																																																		
dc Prebias Voltage Limits	65V to 120V	50V to 120V	50V to 120V	50V to 120V	40V to 120V																																																																																																																																		
*Recommended Operating Conditions dc Supply Voltage (Ebb)	200V 250V 300V	170V 250V 300V	170V 250V 300V	170V 250V 300V	180V 250V 300V																																																																																																																																		
Corresponding Anode Resistor (RA)	8.2K 12K 19K	6.8K 31K 46K	8.2K 47K 68K	8.2K 47K 68K	10K 27K 39K																																																																																																																																		
Temperature Limits	-65°C to +85°C	-65°C to +85°C	-65°C to +85°C	-65°C to +85°C	-55°C to +70°C																																																																																																																																		
Weight	3 oz	0.6 oz	0.5 oz	0.5 oz	0.5 oz																																																																																																																																		
OUTLINE DRAWINGS																																																																																																																																							
Socket (See Page 11)	RTS-5	RTS-11			9 PIN MINIATURE																																																																																																																																		
Mounting Position	PINS 1 & 10 ALIGNED VIEWING DIRECTION WITH PIN 1 IN FRONT	PINS 1 & 10 IN FRONT.			PINS 8 & 3 ALIGNED VIEWING DIRECTION WITH PIN 8 IN FRONT																																																																																																																																		
PIN CONNECTIONS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PIN NUMBER</th> <th>CHARACTER</th> </tr> </thead> <tbody> <tr><td>1</td><td>Internal Conn.</td></tr> <tr><td>2</td><td>Anode</td></tr> <tr><td>3</td><td>6</td></tr> <tr><td>4</td><td>0</td></tr> <tr><td>5</td><td>Internal Conn.</td></tr> <tr><td>6</td><td>Internal Conn.</td></tr> <tr><td>7</td><td>2</td></tr> <tr><td>8</td><td>4</td></tr> <tr><td>9</td><td>1</td></tr> <tr><td>10</td><td>Internal Conn.</td></tr> <tr><td>11</td><td>Internal Conn.</td></tr> <tr><td>12</td><td>8</td></tr> <tr><td>13</td><td>9</td></tr> <tr><td>14</td><td>5</td></tr> <tr><td>15</td><td>Internal Conn.</td></tr> <tr><td>16</td><td>7</td></tr> <tr><td>17</td><td>3</td></tr> </tbody> </table>	PIN NUMBER	CHARACTER	1	Internal Conn.	2	Anode	3	6	4	0	5	Internal Conn.	6	Internal Conn.	7	2	8	4	9	1	10	Internal Conn.	11	Internal Conn.	12	8	13	9	14	5	15	Internal Conn.	16	7	17	3	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PIN NUMBER</th> <th>CHARACTER</th> <th>NL-811 ONLY</th> </tr> </thead> <tbody> <tr><td>1</td><td>7</td><td></td></tr> <tr><td>2</td><td>5</td><td></td></tr> <tr><td>3</td><td>8</td><td></td></tr> <tr><td>4</td><td>Anode</td><td>Anode</td></tr> <tr><td>5</td><td>1</td><td>Plus</td></tr> <tr><td>6</td><td>4</td><td>Minus</td></tr> <tr><td>7</td><td>2</td><td></td></tr> <tr><td>8</td><td>6</td><td></td></tr> <tr><td>9</td><td>9</td><td></td></tr> <tr><td>10</td><td>3</td><td></td></tr> <tr><td>11</td><td>No Pin</td><td></td></tr> <tr><td>12</td><td>No Pin</td><td></td></tr> <tr><td>13</td><td>0</td><td></td></tr> <tr><td>14</td><td>Internal Conn.</td><td>Internal Conn.</td></tr> </tbody> </table>	PIN NUMBER	CHARACTER	NL-811 ONLY	1	7		2	5		3	8		4	Anode	Anode	5	1	Plus	6	4	Minus	7	2		8	6		9	9		10	3		11	No Pin		12	No Pin		13	0		14	Internal Conn.	Internal Conn.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PIN NUMBER</th> <th>CHARACTER</th> </tr> </thead> <tbody> <tr><td>1</td><td>7</td></tr> <tr><td>2</td><td>5</td></tr> <tr><td>3</td><td>8</td></tr> <tr><td>4</td><td>Anode</td></tr> <tr><td>5</td><td>1</td></tr> <tr><td>6</td><td>4</td></tr> <tr><td>7</td><td>2</td></tr> <tr><td>8</td><td>6</td></tr> <tr><td>9</td><td>9</td></tr> <tr><td>10</td><td>3</td></tr> <tr><td>11</td><td>Decimal Pt.</td></tr> <tr><td>12</td><td>No Pin</td></tr> <tr><td>13</td><td>0</td></tr> <tr><td>14</td><td>Internal Conn.</td></tr> </tbody> </table>	PIN NUMBER	CHARACTER	1	7	2	5	3	8	4	Anode	5	1	6	4	7	2	8	6	9	9	10	3	11	Decimal Pt.	12	No Pin	13	0	14	Internal Conn.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PIN NUMBER</th> <th>CHARACTER</th> </tr> </thead> <tbody> <tr><td>1</td><td>Internal Conn.</td></tr> <tr><td>2</td><td>Even Anode</td></tr> <tr><td>3</td><td>8 and 9</td></tr> <tr><td>4</td><td>6 and 7</td></tr> <tr><td>5</td><td>4 and 5</td></tr> <tr><td>6</td><td>Screen</td></tr> <tr><td>7</td><td>2 and 3</td></tr> <tr><td>8</td><td>and 1</td></tr> <tr><td>9</td><td>Odd Anode</td></tr> </tbody> </table>	PIN NUMBER	CHARACTER	1	Internal Conn.	2	Even Anode	3	8 and 9	4	6 and 7	5	4 and 5	6	Screen	7	2 and 3	8	and 1	9	Odd Anode
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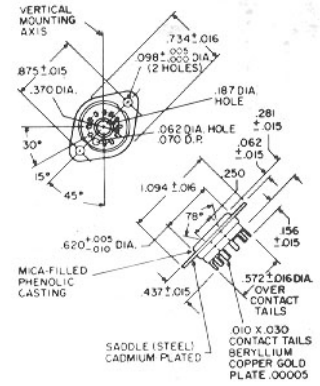
*Other characters available by special order.
 **See Fig. 1 & 3, Page 7. Use of the highest voltage available with the appropriate resistor is recommended.
 † Decimal point cathode current - average, Max. - 0.7 ma & Min. - 0.2 ma.

READOUT TUBE SOCKETS

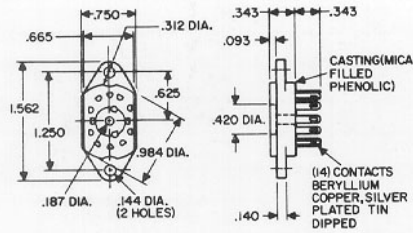
RTS-1, RTS-2



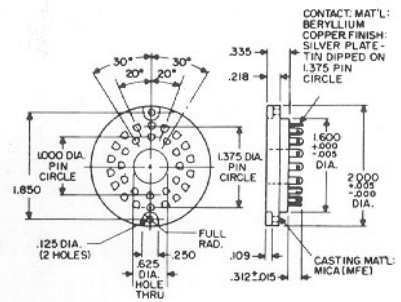
RTS-3



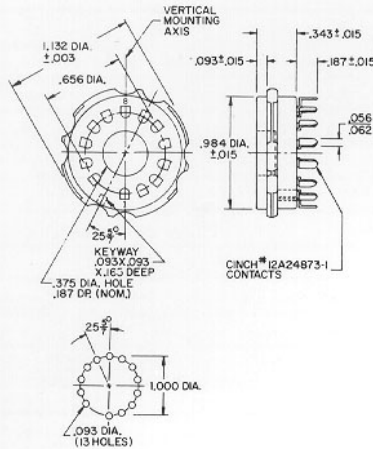
RTS-4



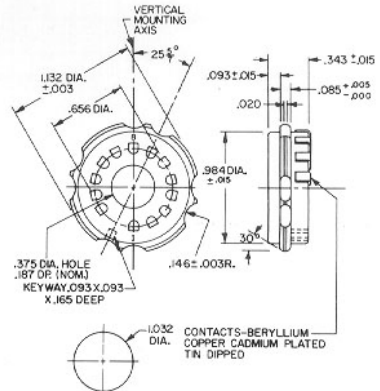
RTS-5



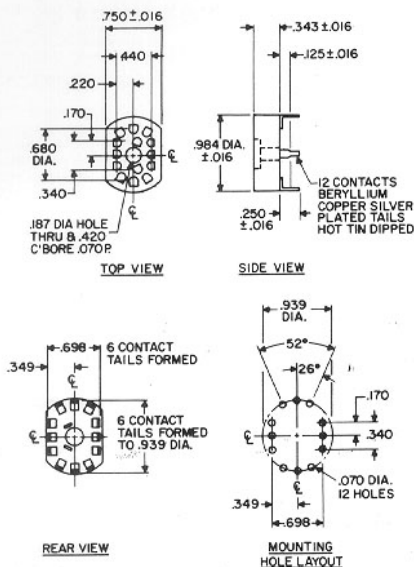
RTS-6, RTS-8



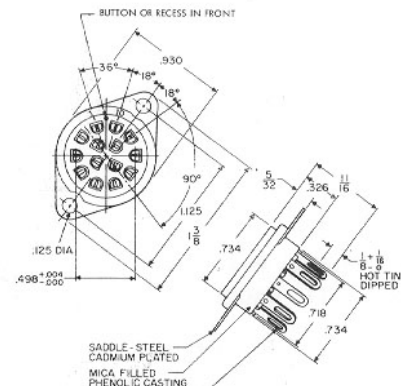
RTS-9



RTS-10



RTS-11



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