



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE8000 thru NTE8035 Radial Lead Thermal Cutoff (Thermal Fuse)

### Description:

The TCO (Thermal Cut-Off) responds to temperature by interrupting an electrical circuit when the operating and/or environmental temperature exceeds the thermal rating of the device. NTE's radial lead TCOs accomplish this when the internal fusible alloy is melted by reaching the temperature of the melting point of the alloy, forming two separate balls at the edges of the leads by surface tension of the alloy to permanently open the circuit.

Axial-lead TCO devices presently predominate over radial-lead devices. This results, at least in part, from design difficulties that exist in manufacturing a reliable, inexpensive radial-lead TCO device. However, in many circuit applications radial-lead devices are preferable since they take up a smaller area on a printed circuit board. Their compact size enables ease of assembly into the smallest of transformers ensuring total thermal protection

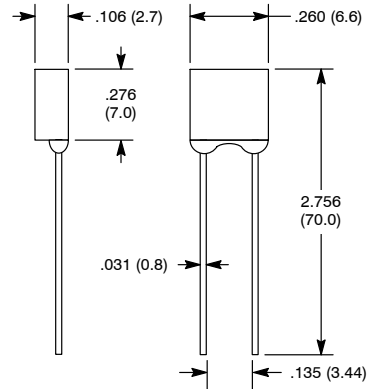
### Features

- Maximum Rating: 5 Amps, 250 Volts
- Typical Operating Temperature Tolerance +1-2°C
- Full 2 3/4" leads to fit all replacement configurations
- All types meet UL E214712 and VDC-40017057
- RoHS Compliant

### Characteristics

| NTE Type No. | Diag. No. | Functioning Temperature |     | Holding Temperature |     | Maximum Temperature |     |
|--------------|-----------|-------------------------|-----|---------------------|-----|---------------------|-----|
|              |           | °C                      | °F  | °C                  | °F  | °C                  | °F  |
| 8000         | 729       | 76                      | 168 | 53                  | 127 | 200                 | 392 |
| 8005         | 729       | 86                      | 187 | 61                  | 142 | 200                 | 392 |
| 8010         | 729       | 102                     | 216 | 77                  | 171 | 200                 | 392 |
| 8015         | 729       | 115                     | 239 | 89                  | 192 | 200                 | 392 |
| 8020         | 729       | 130                     | 266 | 103                 | 217 | 200                 | 392 |
| 8025         | 729       | 136                     | 277 | 111                 | 232 | 200                 | 392 |
| 8030         | 729       | 145                     | 293 | 118                 | 244 | 200                 | 392 |
| 8035         | 729       | 150                     | 302 | 123                 | 253 | 200                 | 392 |

Diagram 729



Note 1. Temperature sensitive devices. **Do not** store above +48°C (+120°F).

Note 2. With proper air flow, heat generation below 5 Amps is minimal, above 5 Amps the upper limit on the current capacity will depend on the environment for each specific application.

Note 3. A general rule of thumb for continuous operating temperature for thermal cut-offs is 30°C **less** than the Maximum Opening Temperature.

Rev. 8-19

