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## NTE8065 thru NTE8242 Thermal Cutoff (Thermal Fuse)

### Description:

Twenty One Thermal Cut-offs (also known as Thermal Fuses) are now included in the NTE product line. They are miniature, NON-RESETTABLE temperature sensitive devices designed to prevent appliances and electronic equipment from over-heating. NTE thermal cutoffs are UL and CSA listed.

Literally thousands of different applications have been devised for thermal-cutoffs, thus providing a large replacement market. Such applications include:

- Hair Dryers
- Irons
- Electric Motors
- Microwave Ovens
- Refrigerators
- Hot Plates
- Window Fans
- Popcorn Poppers
- Battery Chargers
- Glue Guns
- Coffee Makers
- Dishwashers
- Toasters
- UPS
- And hundreds of others

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. This is accomplished when the internal organic pellet experiences a phase change, allowing the spring activated contacts to permanently open the circuit.

NTE Type No.	Diag. No.	Functioning Temperature		Holding Temperature	
		°C	°F	°C	°F
8065	193	66	151	42	108
8070	193	72	162	50	122
8076	193	77	171	-	-
8081	193	84	184	60	140
8085	193	87	189	-	-
8090	193	93	200	-	-
8096	193	98	209	76	169
8098	193	100	212	-	-
8103	193	104	220	80	176
8108	193	109	228	88	190
8115	193	117	243	-	-

NTE Type No.	Diag. No.	Functioning Temperature		Holding Temperature	
		°C	°F	°C	°F
8118	193	121	250	94	201
8125	193	128	263	106	223
8139	193	142	287	110	230
8149	193	152	306	128	262
8167	193	170	338	146	295
8181	193	184	364	160	320
8182	193	192	378	162	324
8213	193	216	421	191	376
8226	193	228	443	-	-
8242	193	240	464	200	392

Functioning Temperature: temperature at which the Thermal Cutoff will open + tolerances.

Holding Temperature: The maximum temperature at which the thermal cut-off can be maintained while conducting the rated current for 168 hours which will not cause a change in the state of conductivity to open the circuit.

Electrical Rating Volts	Interrupting	Continuous
120/250 VAC	15A	10A
240 VAC	25A RES	16.7 RES
277 VAC	20A RES	15A RES

Electrical Rating Volts	Interrupting	Continuous
120-277 VAC	125VA Pilot Duty	
180 VAC	3A Motor Rating	

### FEATURES:

- Maximum Current Rating: 15 Amps
- Typical Opening Temperature Tolerance: +0°C, -5°C
- 18 Gauge Solid Copper Wire
- Full 1 1/3" leads to fit all replacement configurations
- All types meet the requirements of Underwriters Laboratories Specifications, CSA, and VDE.
- Each device comes packaged with 2 crimp splices for solderless connection.
- UL File No. E212625
- UL File No. E126429
- UL File No. E117626 (Guide # XCMQ2)
- C-UL File No. E117626 (Guide # XCMQ8)
- CSA File No. LR43279
- VDE File No. 115369

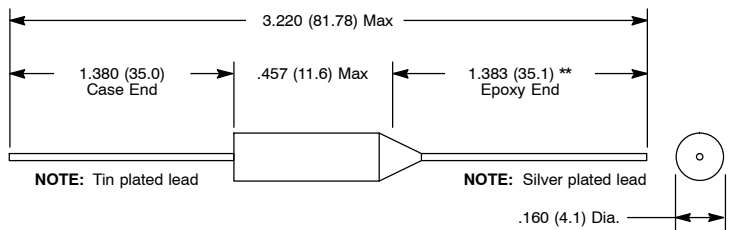
**Note 1:** Temperature sensitive devices. **Do not** store above +48°C (+120°F).

**Note 2:** Color Band does not denote temperature group.

**Note 3:** The electrical resistance of the NTE series thermal cut-off is comparable to that found in an equal length of 18 gauge solid copper wire. With proper air flow, heat generation below 15 Amps is minimal, above 15Amps the upper limit on the current capacity will depend on the environment for each specific application.

**Note 4:** A general rule of thumb for continuous operating temperature for thermal cut-offs is 30°C **less** than the Maximum Opening Temperature.

Diagram 193



NOTE: Tin plated lead

NOTE: Silver plated lead

\*\* Some devices may have a lead length of .660 (12.8)