

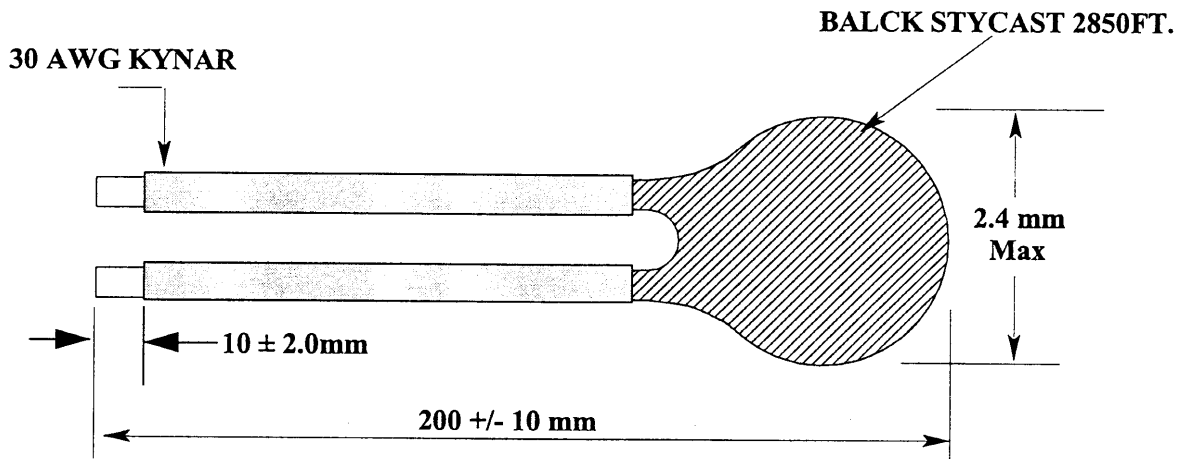
# BETATHERM DATA SHEET

BETATHERM PART NO.:10K3A542I

F.E.C. NO. :732-242

DESCRIPTION NTC THERMISTOR WITH LEAD TYPE 30 AWG SOLID  
SILVER PLATED COPPER WITH KYNAR INSULATION.

## MECHANICAL SPECIFICATION



## ELECTRICAL SPECIFICATION

Resistance @ 25°C: 10,000 Ohms  
Tolerance: ±0.2°C from 0°C to 70°C  
Operating Range: -55°C to +150°C  
Beta Value 0/50: 3892 +/- 1,0%  
Alpha Value @ 25°C: -4.39%/°C

| Curve 3 | R @ 25°C : | 10000.00  |
|---------|------------|-----------|
| Temp    | Multiplier | R nominal |
| -50     | 66.7820    | 667820.00 |
| -45     | 47.0610    | 470610.00 |
| -40     | 33.5668    | 335668.00 |
| -35     | 24.2193    | 242193.00 |
| -30     | 17.6682    | 176682.00 |
| -25     | 13.0242    | 130242.00 |
| -20     | 9.6976     | 96976.02  |
| -15     | 7.2895     | 72895.20  |
| -10     | 5.5298     | 55297.51  |
| -5      | 4.2314     | 42314.39  |
| 0       | 3.2651     | 32650.98  |
| 5       | 2.5396     | 25395.65  |
| 10      | 1.9904     | 19903.64  |
| 15      | 1.5714     | 15714.03  |
| 20      | 1.2494     | 12493.78  |
| 25      | 1.0000     | 10000.00  |
| 30      | 0.8056     | 8055.95   |
| 35      | 0.6530     | 6530.20   |
| 40      | 0.5325     | 5325.04   |
| 45      | 0.4367     | 4366.87   |
| 50      | 0.3601     | 3600.98   |
| 55      | 0.2985     | 2985.08   |
| 60      | 0.2487     | 2487.08   |
| 65      | 0.2082     | 2082.33   |
| 70      | 0.1752     | 1751.64   |
| 75      | 0.1480     | 1480.11   |
| 80      | 0.1256     | 1256.17   |
| 85      | 0.1071     | 1070.56   |
| 90      | 0.0916     | 916.12    |
| 95      | 0.0787     | 786.99    |
| 100     | 0.0679     | 678.64    |
| 105     | 0.0587     | 587.30    |
| 110     | 0.0510     | 510.08    |
| 115     | 0.0444     | 444.49    |
| 120     | 0.0389     | 388.59    |
| 125     | 0.0341     | 340.82    |
| 130     | 0.0300     | 299.82    |
| 135     | 0.0265     | 264.54    |
| 140     | 0.0234     | 234.08    |
| 145     | 0.0208     | 207.70    |
| 150     | 0.0185     | 184.79    |