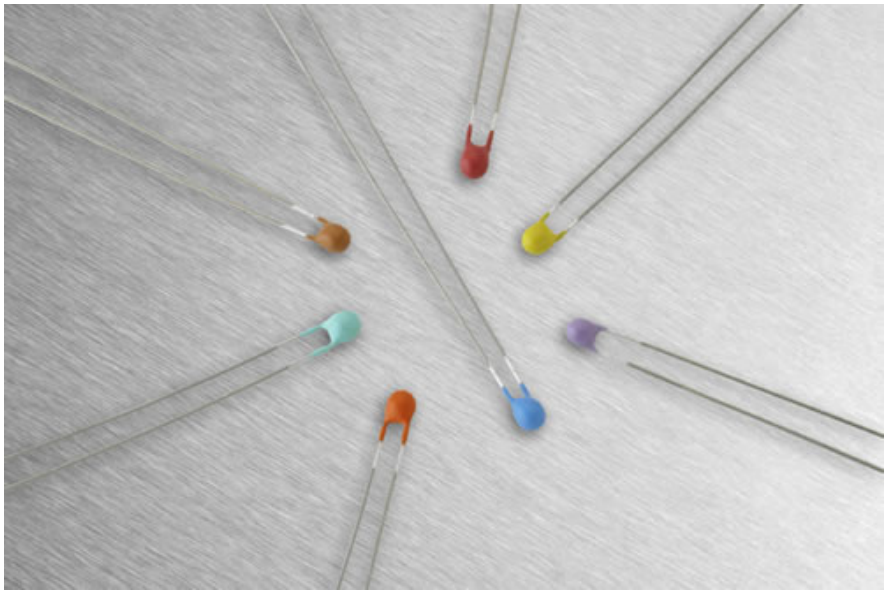
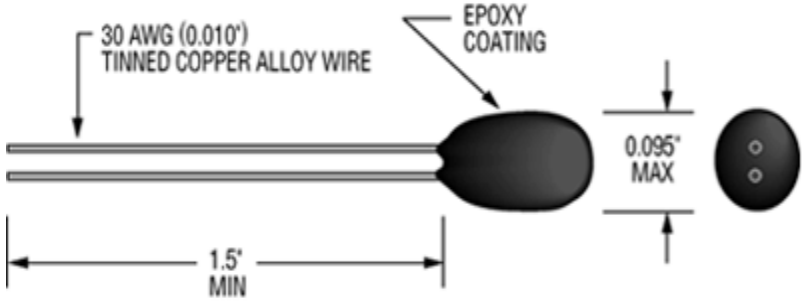
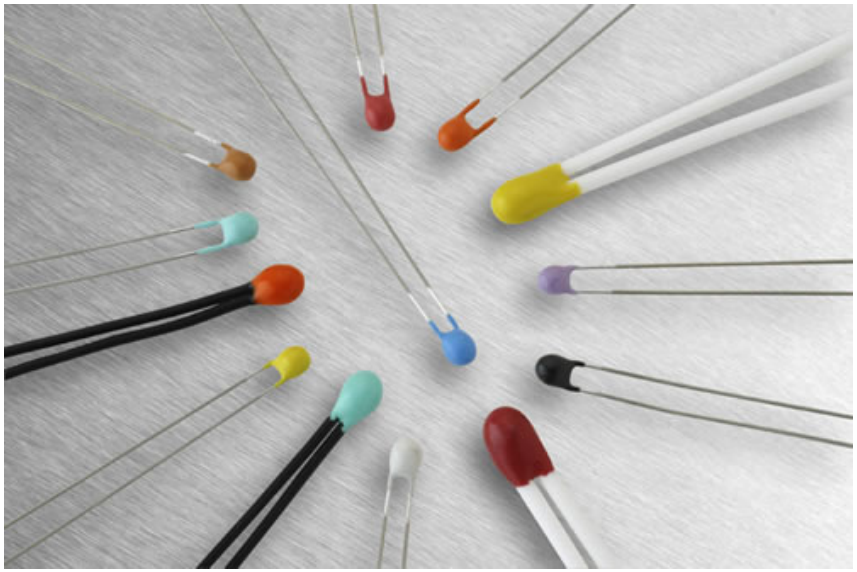


U.S. SENSOR Corp.

Ultra Precision Interchangeable Thermistors ±0.05°C Accuracy



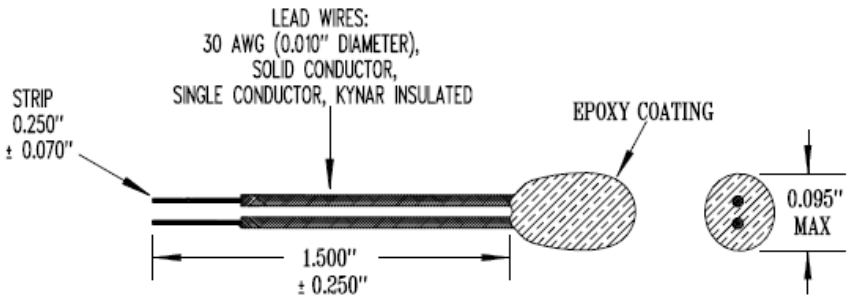
P/N	Resistance @ 25°C (Ohms)	R/T Curve	Accuracy 0-50°C	Beta 0-50°C
PR222J2	2,252	J	±0.05°C	3892°K
PR103J2	10,000	J	±0.05°C	3892°K



U.S. SENSOR Corp.

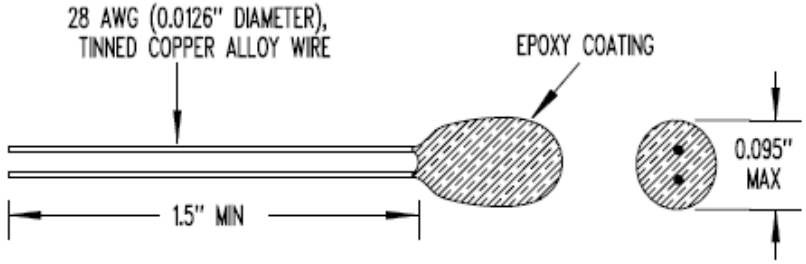
NTC Epoxy Coated Thermistors

KS & KT Series (0.1°C/0.2°C)

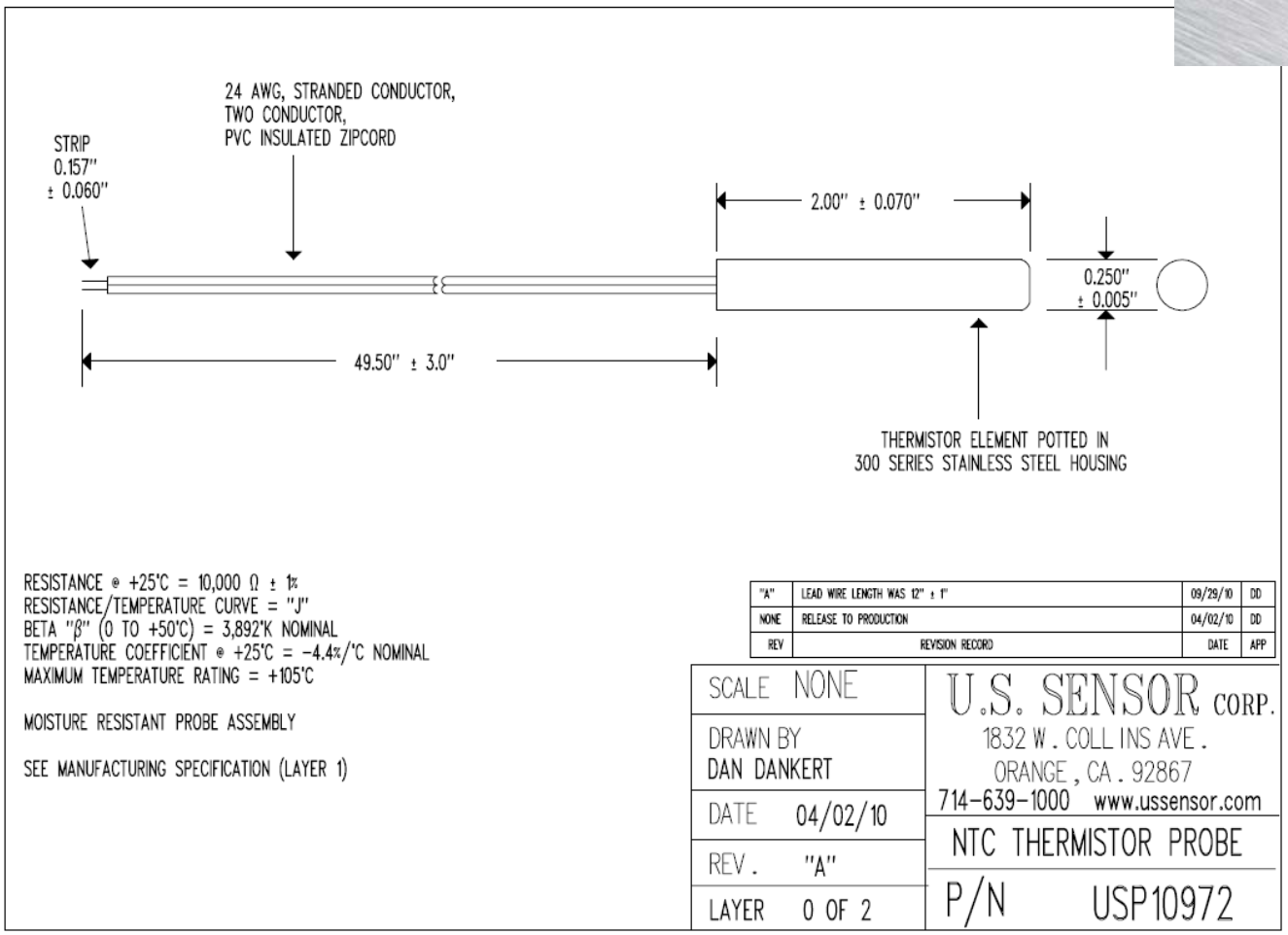


P/N	Resistance @ 25°C Ω	Accuracy/ Tolerance	R/T Curve
KS502J2	5,000	± 0.1°C(0-70°C)	J
KS103G2	10,000	± 0.1°C(0-70°C)	G
KS103J2	10,000	± 0.1°C(0-70°C)	J
KT103G2	10,000	± 0.2°C(0-70°C)	G
KT103J2	10,000	± 0.2°C(0-70°C)	J
LC103J2JRA	10,000	± 5% @ 25°C	J
LC303J2J	30,000	± 5% @ 25°C	J
SC104J4JRA	100,000	± 5% @ 25°C	J

LC Series

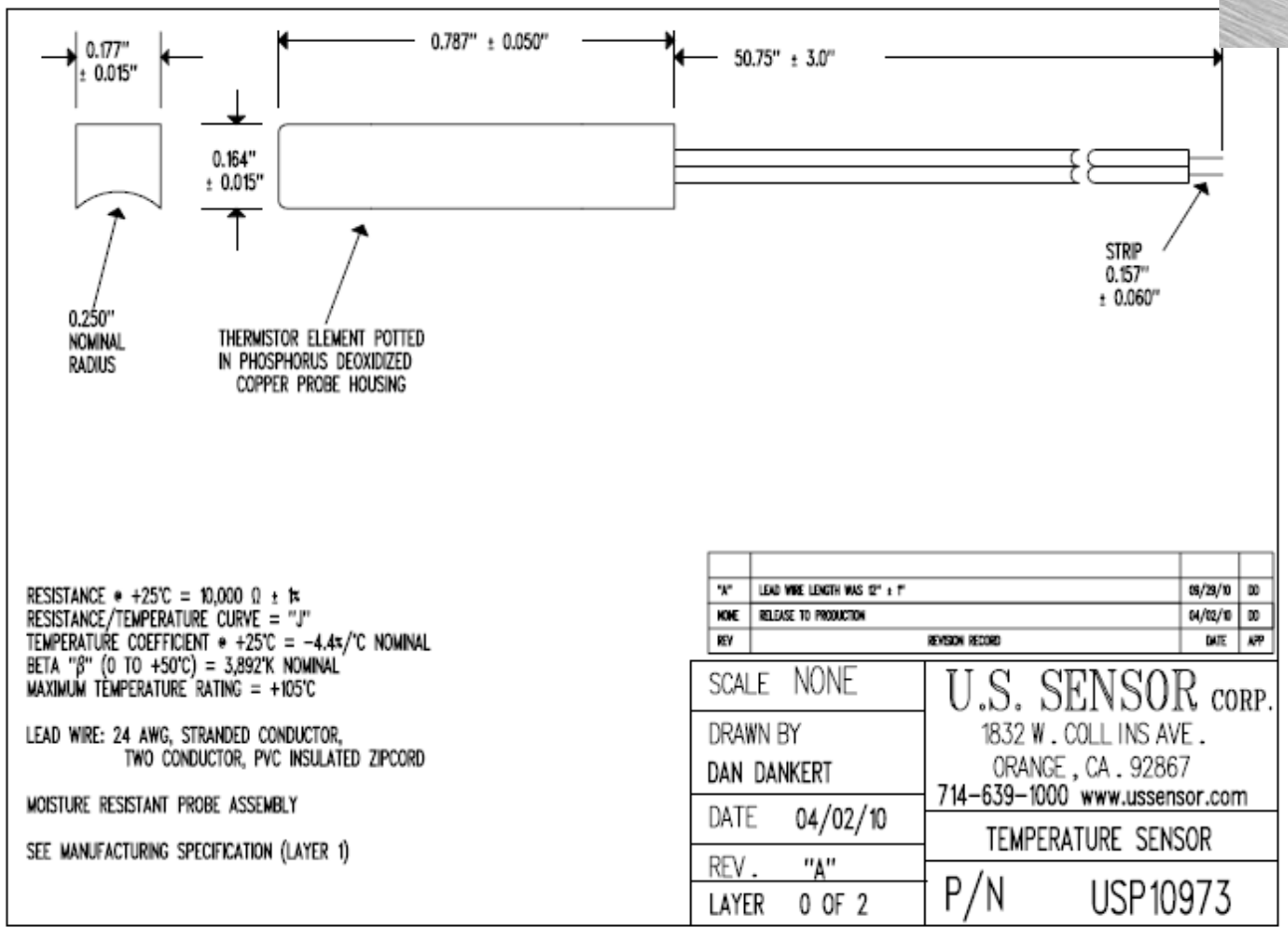


U.S. SENSOR Corp.



- **± 1% Tolerance**
- **105°C Max Temp**
- **Moisture Resistant**
- **PVC Insulated Zip Cord Lead Wire**
- **0.250” Diameter Stainless Steel Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
MAXIMUM TEMPERATURE RATING = +105°C

LEAD WIRE: 24 AWG, STRANDED CONDUCTOR,
TWO CONDUCTOR, PVC INSULATED ZIPCORD

MOISTURE RESISTANT PROBE ASSEMBLY

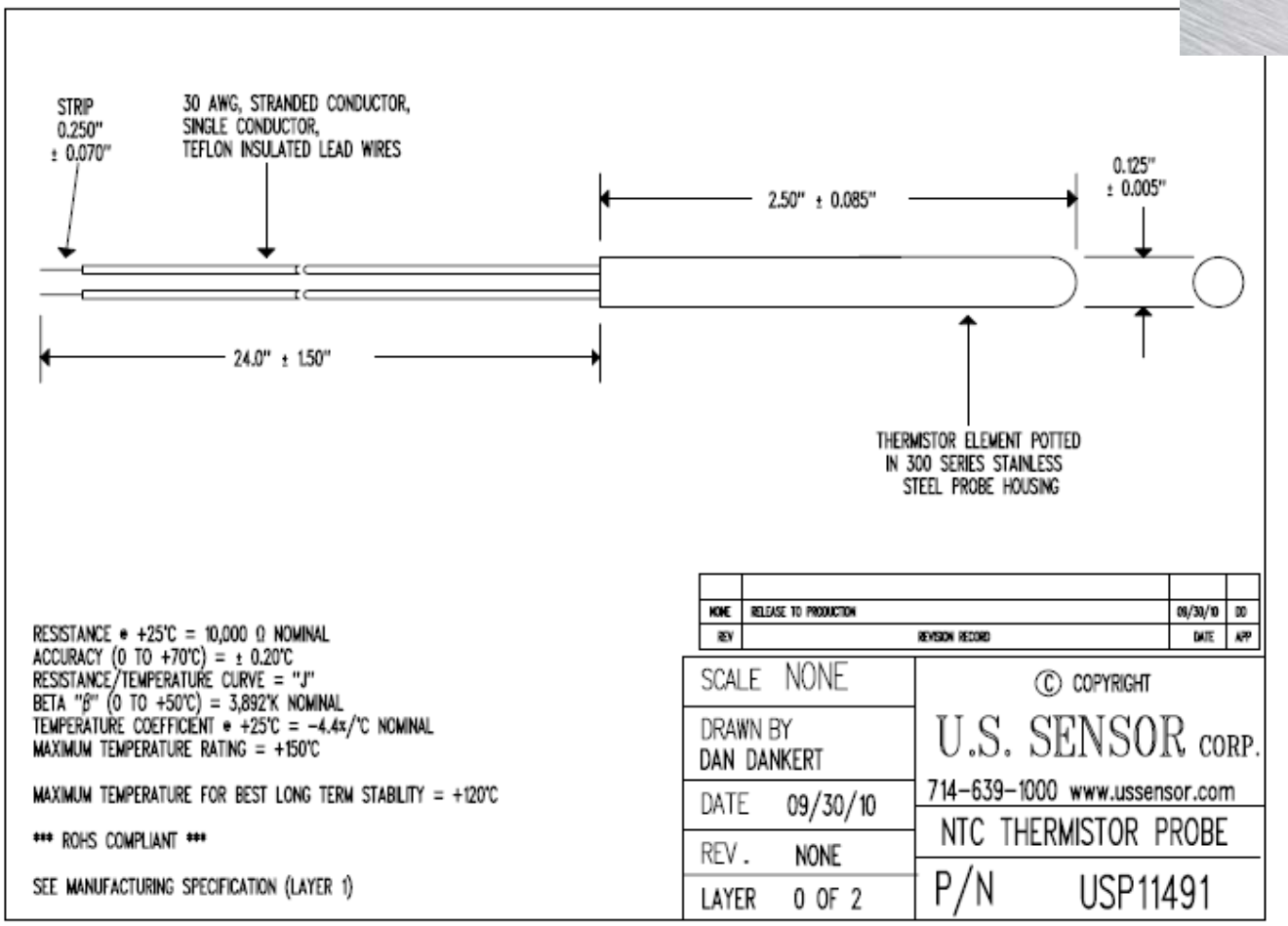
SEE MANUFACTURING SPECIFICATION (LAYER 1)

"A"	LEAD WIRE LENGTH WAS 12" ± 1"	05/29/10	DD
NONE	RELEASE TO PRODUCTION	04/02/10	DD
REV	REVISION RECORD	DATE	APP

SCALE NONE	U.S. SENSOR CORP.
DRAWN BY DAN DANKERT	1832 W. COLLINS AVE. ORANGE, CA. 92867 714-639-1000 www.ussensor.com
DATE 04/02/10	TEMPERATURE SENSOR
REV. "A"	P/N USP10973
LAYER 0 OF 2	

- **± 1% Tolerance**
- **105°C Max Temp**
- **Moisture Resistant**
- **PVC Insulated Zip Cord Lead Wire**
- **0.164” Copper Housing with Radius**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω NOMINAL
ACCURACY (0 TO +70°C) = ± 0.20°C
RESISTANCE/TEMPERATURE CURVE = "J"
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +150°C

MAXIMUM TEMPERATURE FOR BEST LONG TERM STABILITY = +120°C

*** ROHS COMPLIANT ***

SEE MANUFACTURING SPECIFICATION (LAYER 1)

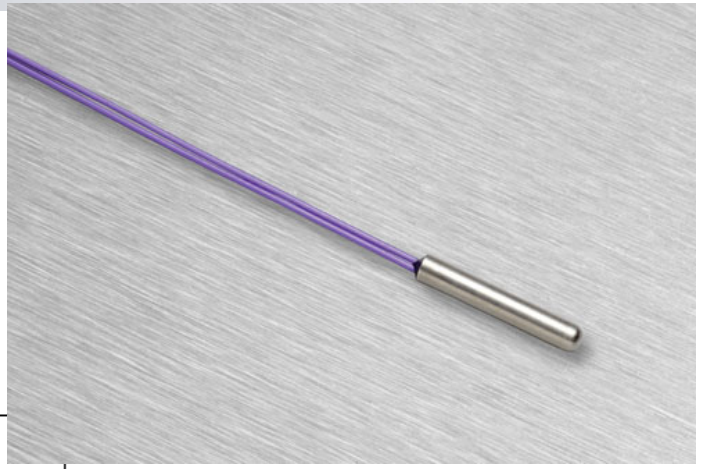
REV	REVISION RECORD	DATE	APP
NONE	RELEASE TO PRODUCTION	09/30/10	DD

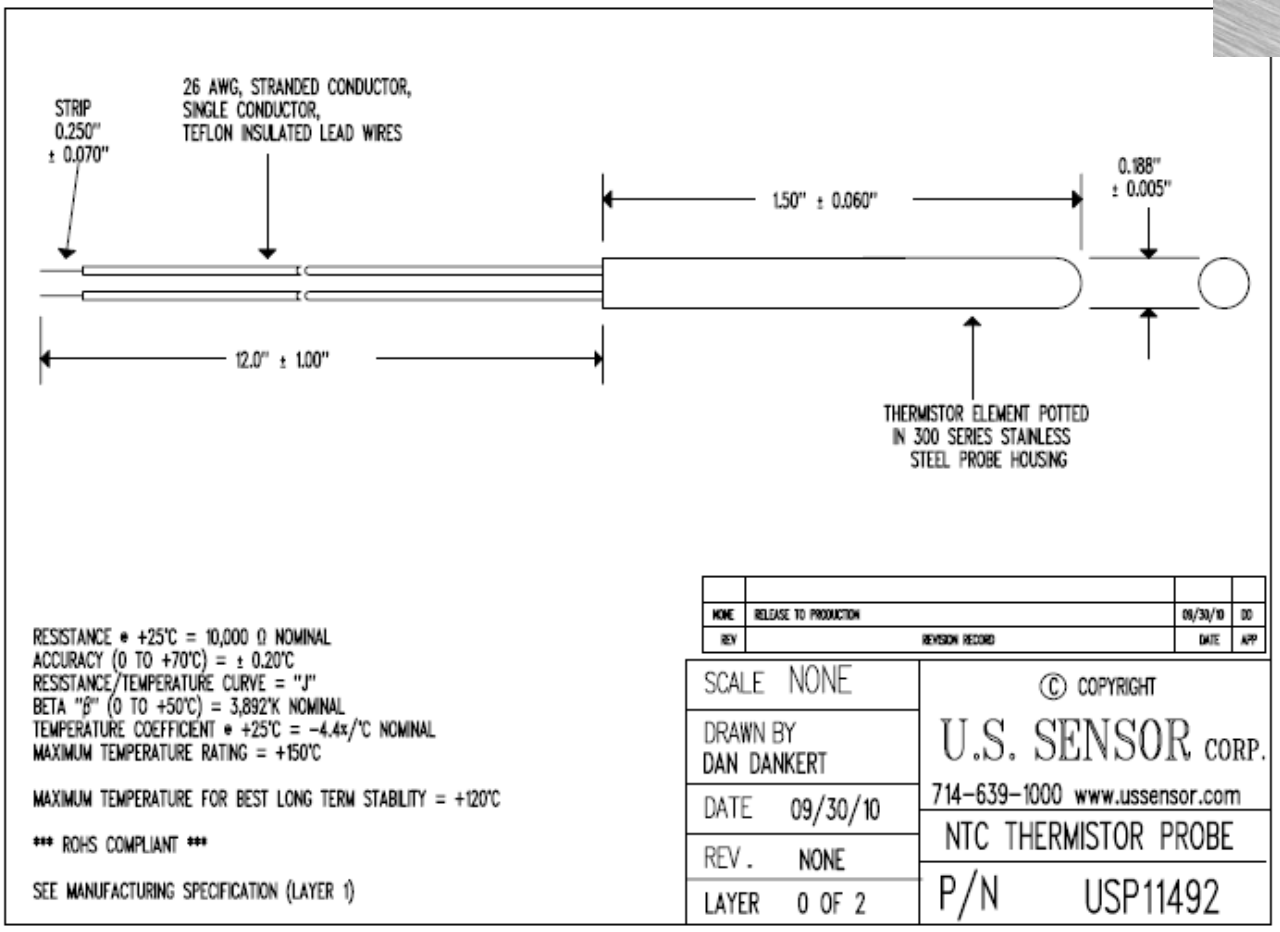
SCALE	NONE
DRAWN BY	DAN DANKERT
DATE	09/30/10
REV.	NONE
LAYER	0 OF 2

U.S. SENSOR CORP.
714-639-1000 www.ussensor.com
NTC THERMISTOR PROBE
P/N USP11491

- **± 0.2°C Accuracy**
- **150°C Max Temp**
- **Teflon Insulated Lead Wire**
- **0.125” Diameter Stainless Steel Housing**

U.S. SENSOR Corp.





RESISTANCE @ +25°C = 10,000 Ω NOMINAL
ACCURACY (0 TO +70°C) = ± 0.20°C
RESISTANCE/TEMPERATURE CURVE = "J"
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +150°C

MAXIMUM TEMPERATURE FOR BEST LONG TERM STABILITY = +120°C

*** ROHS COMPLIANT ***

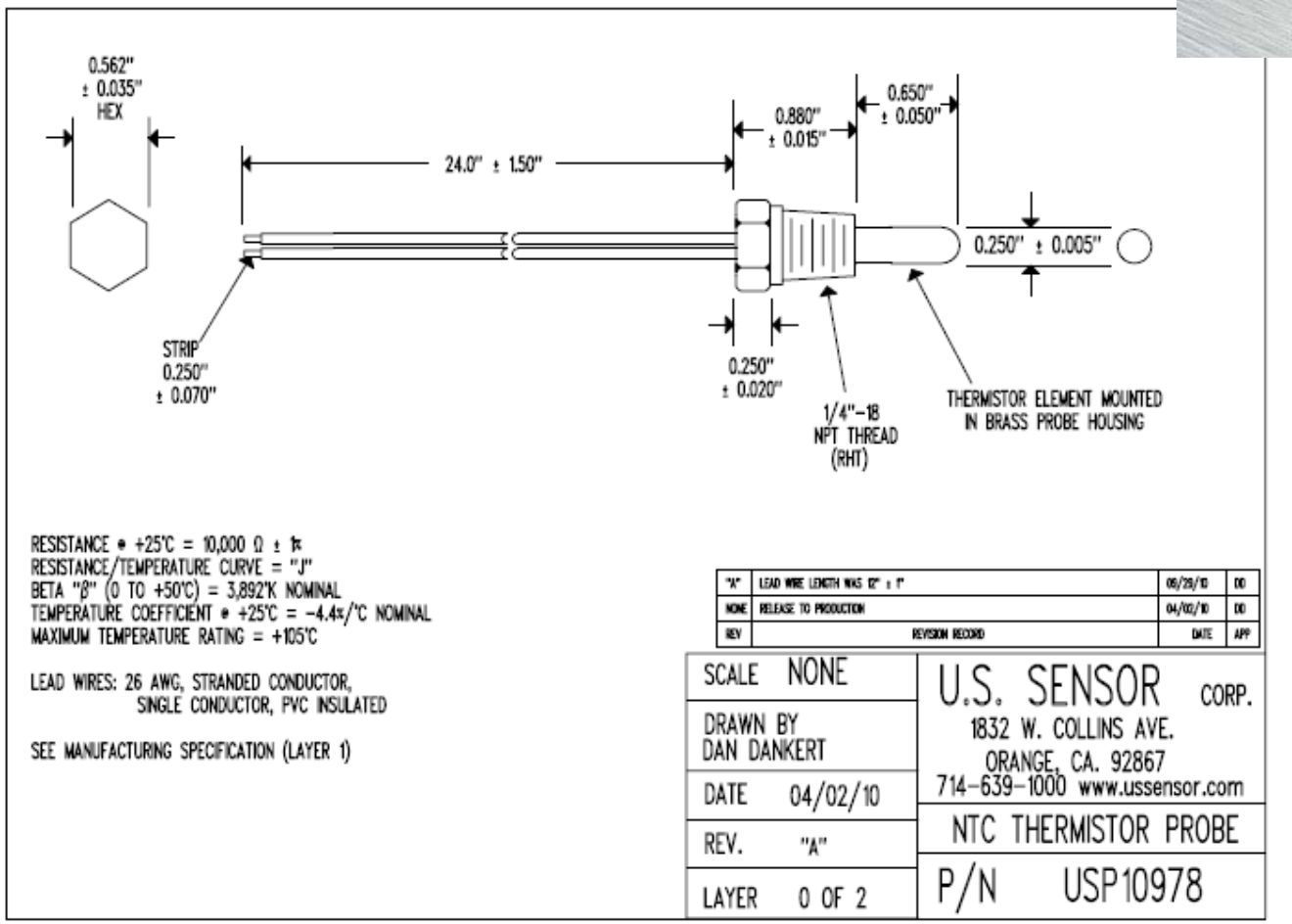
SEE MANUFACTURING SPECIFICATION (LAYER 1)

NONE	RELEASE TO PRODUCTION	09/30/10	DD
REV	REVISION RECORD	DATE	APP

SCALE NONE	© COPYRIGHT U.S. SENSOR CORP.
DRAWN BY DAN DANKERT	714-639-1000 www.ussensor.com
DATE 09/30/10	NTC THERMISTOR PROBE
REV. NONE	P/N USP11492
LAYER 0 OF 2	

- **± 0.2°C Accuracy**
- **150°C Max Temp**
- **Teflon Insulated Lead Wire**
- **0.188” Diameter Stainless Steel Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
BETA "B" (0 TO +50°C) = 3,892°K NOMINAL
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +105°C

LEAD WIRES: 26 AWG, STRANDED CONDUCTOR,
SINGLE CONDUCTOR, PVC INSULATED

SEE MANUFACTURING SPECIFICATION (LAYER 1)

REV	REVISION RECORD	DATE	APP
"A"	LEAD WIRE LENGTH WAS 12" ± 1"	05/25/10	DD
NONE	RELEASE TO PRODUCTION	04/02/10	DD

SCALE	NONE
DRAWN BY	DAN DANKERT
DATE	04/02/10
REV.	"A"
LAYER	0 OF 2

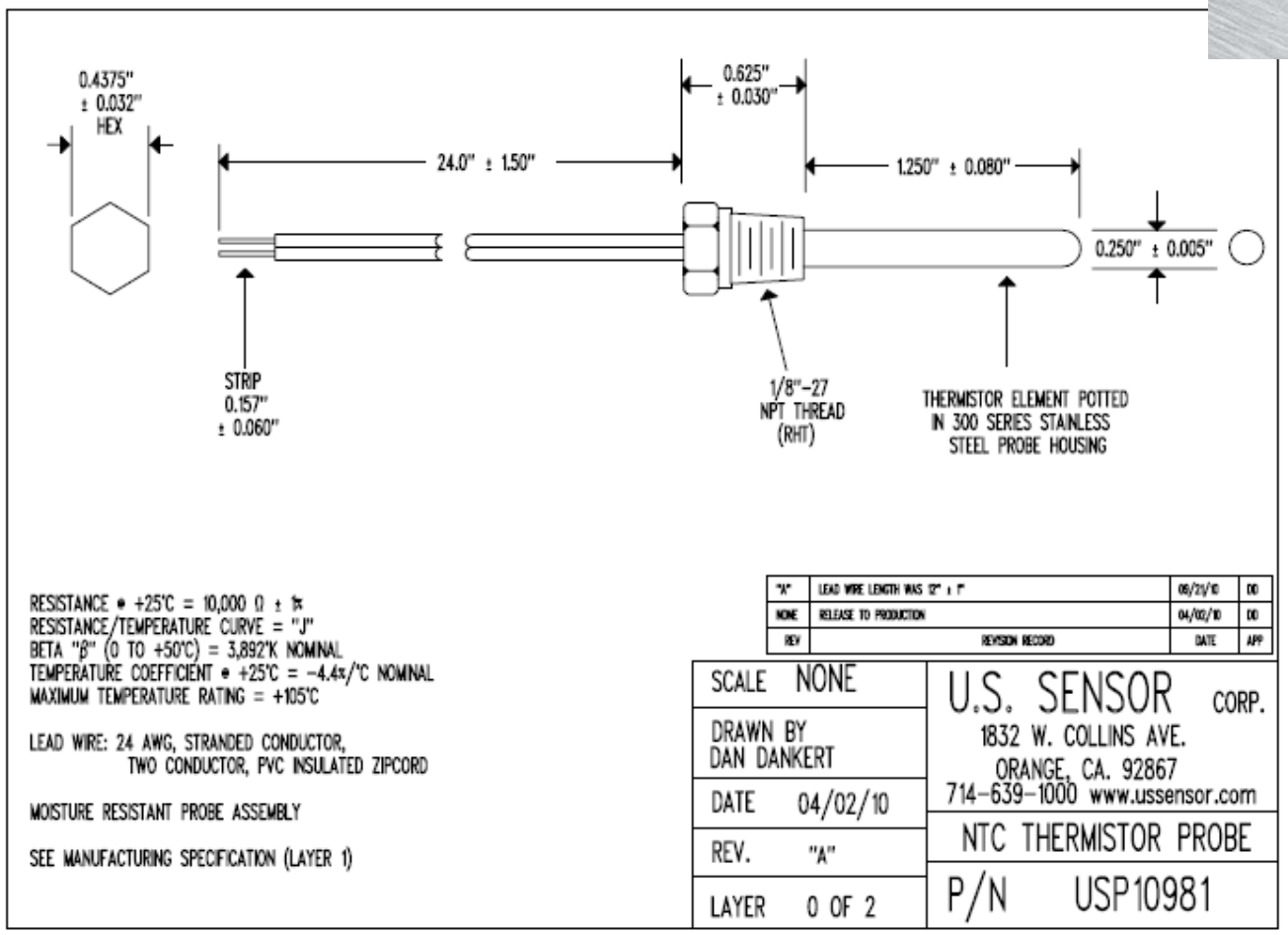
U.S. SENSOR CORP.
1832 W. COLLINS AVE.
ORANGE, CA. 92867
714-639-1000 www.ussensor.com

NTC THERMISTOR PROBE

P/N USP10978

- **± 1% Tolerance**
- **105°C Max Temp**
- **PVC Insulated Lead Wire**
- **0.250" Diameter Brass NPT Threaded Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
TEMPERATURE COEFFICIENT @ +25°C = −4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +105°C

LEAD WIRE: 24 AWG, STRANDED CONDUCTOR,
TWO CONDUCTOR, PVC INSULATED ZIPCORD

MOISTURE RESISTANT PROBE ASSEMBLY

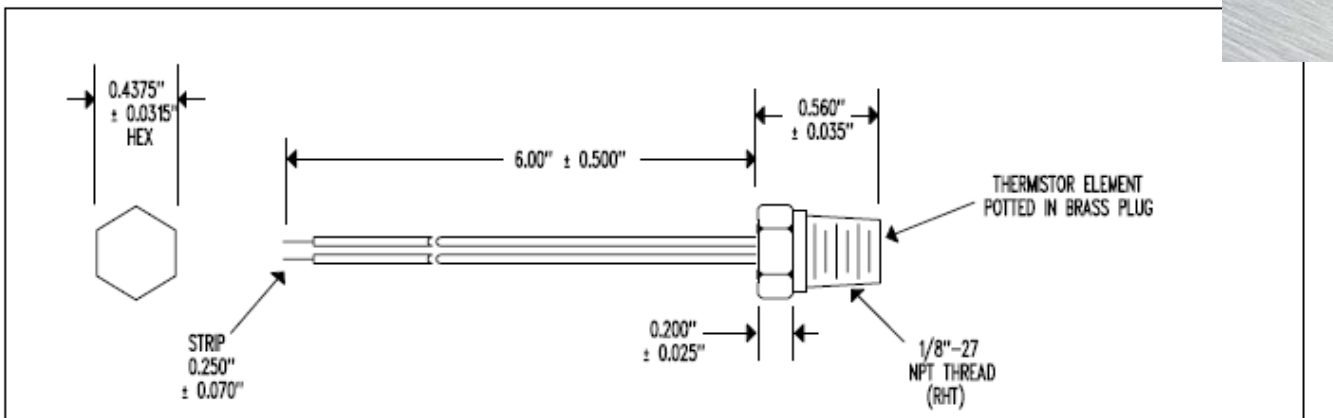
SEE MANUFACTURING SPECIFICATION (LAYER 1)

REV	REVISION RECORD	DATE	APP
"A"	LEAD WIRE LENGTH WAS 12" ± 1"	06/21/10	DD
NONE	RELEASE TO PRODUCTION	04/02/10	DD

SCALE NONE	U.S. SENSOR CORP.
DRAWN BY DAN DANKERT	1832 W. COLLINS AVE. ORANGE, CA. 92867 714-639-1000 www.ussensor.com
DATE 04/02/10	NTC THERMISTOR PROBE
REV. "A"	P/N USP10981
LAYER 0 OF 2	

- **± 1% Tolerance**
- **105°C Max Temp**
- **Moisture Resistant**
- **PVC Insulated Zip Cord Lead Wire**
- **0.250” Diameter Stainless Steel NPT Threaded Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 5%
RESISTANCE/TEMPERATURE CURVE = "J"
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +105°C

LEAD WIRES: 28 AWG, STRANDED CONDUCTOR,
SINGLE CONDUCTOR, PVC INSULATED

SEE MANUFACTURING SPECIFICATION (LAYER 1)

REV	REVISION RECORD	DATE	APP
"A"	LEAD WIRE LENGTH WAS 3" ± 0.50"	05/21/10	DD
NONE	RELEASE TO PRODUCTION	04/06/10	DD

SCALE	NONE
DRAWN BY	DAN DANKERT
DATE	04/06/10
REV.	"A"
LAYER	0 OF 2

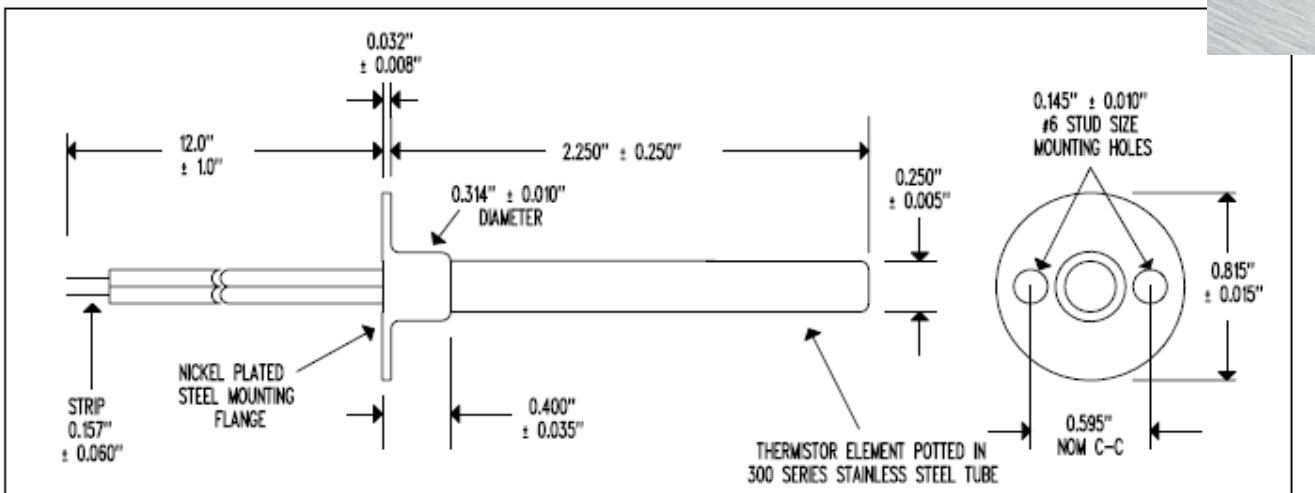
U.S. SENSOR CORP.
1832 W. COLLINS AVE.
ORANGE, CA. 92867
714-639-1000 www.ussensor.com

NTC THERMISTOR PROBE

P/N USP10997

- **± 5% Tolerance**
- **105°C Max Temp**
- **PVC Insulated Lead Wire**
- **Brass NPT Threaded Plug**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
MAXIMUM TEMPERATURE RATING = +105°C

LEAD WIRE: 24 AWG, STRANDED CONDUCTOR,
TWO CONDUCTOR, PVC INSULATED ZIPCORD

MOISTURE RESISTANT PROBE ASSEMBLY

SEE MANUFACTURING SPECIFICATION (LAYER 1)

NONE	RELEASE TO PRODUCTION	04/02/10	DD
REV	REVISION RECORD	DATE	APP

SCALE	NONE
DRAWN BY	DAN DANKERS
DATE	04/02/10
REV.	NONE
LAYER	0 OF 2

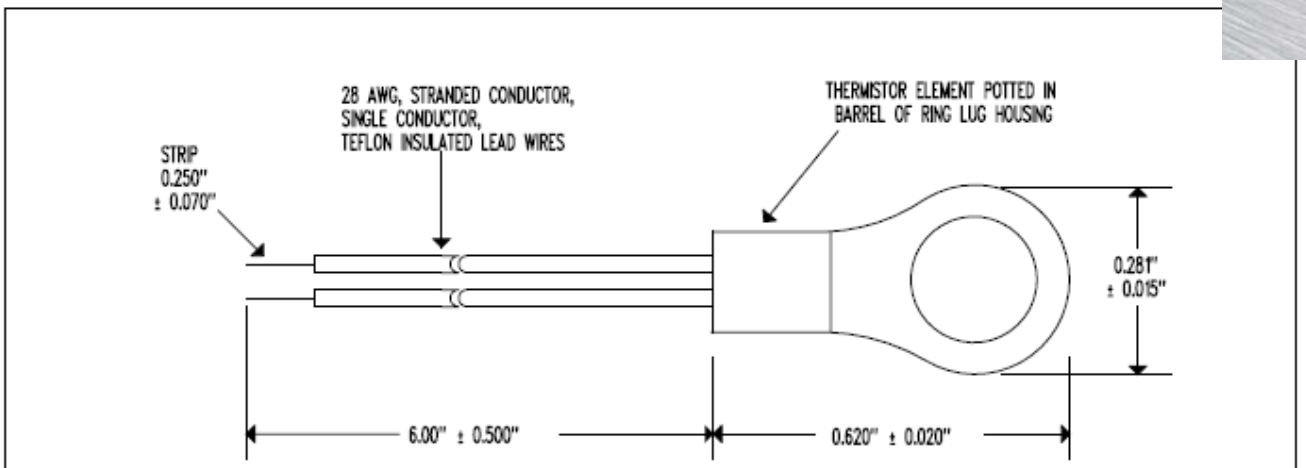
U.S. SENSOR CORP.
1832 W. COLLINS AVE.
ORANGE, CA. 92867
714-639-1000 www.ussensor.com

NTC THERMISTOR PROBE

P/N USP10979

- **± 1% Tolerance**
- **105°C Max Temp**
- **Moisture Resistant**
- **PVC Insulated Zip Cord Lead Wire**
- **0.250” Diameter Stainless Steel Flanged Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
TEMPERATURE COEFFICIENT @ +25°C = −4.4%/°C NOMINAL
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
MAXIMUM TEMPERATURE RATING = +150°C

MAXIMUM TEMPERATURE FOR BEST LONG TERM STABILITY = +120°C

MOUNTING-HOLE DIAMETER = 0.145" NOMINAL
MOUNTING-HOLE STUD-SIZE = #6

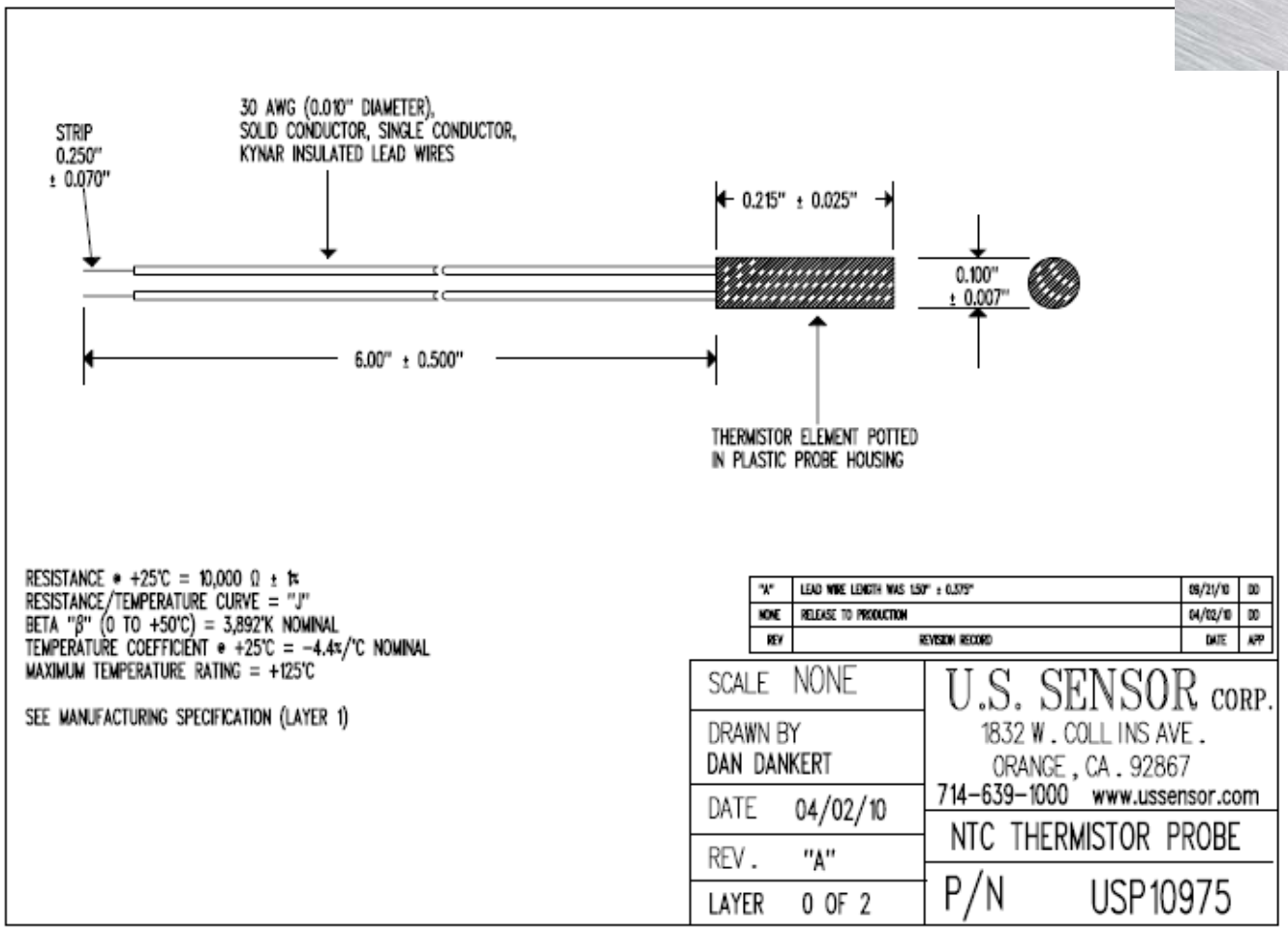
SEE MANUFACTURING SPECIFICATION (LAYER 1)

REV	REVISION RECORD	DATE	APP
"A"	LEAD WIRE LENGTH WAS 1.50" ± 0.375"	06/21/10	DD
NONE	RELEASE TO PRODUCTION	04/02/10	DD

SCALE NONE	U.S. SENSOR CORP.
DRAWN BY DAN DANKERT	1832 W. COLLINS AVE. ORANGE, CA. 92867 714-639-1000 www.ussensor.com
DATE 04/02/10	THERMISTOR PROBE
REV. "A"	P/N USP10976
LAYER 0 OF 2	

- **± 1% Tolerance**
- **150°C Max Temp**
- **Teflon Insulated Lead Wire**
- **#6 Stud Size Ring Lug**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
TEMPERATURE COEFFICIENT @ +25°C = −4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +125°C

SEE MANUFACTURING SPECIFICATION (LAYER 1)

REV	REVISION RECORD	DATE	APP
"A"	LEAD WIRE LENGTH WAS 1.50" ± 0.375"	09/21/10	DD
NONE	RELEASE TO PRODUCTION	04/02/10	DD

SCALE	NONE
DRAWN BY	DAN DANKERT
DATE	04/02/10
REV.	"A"
LAYER	0 OF 2

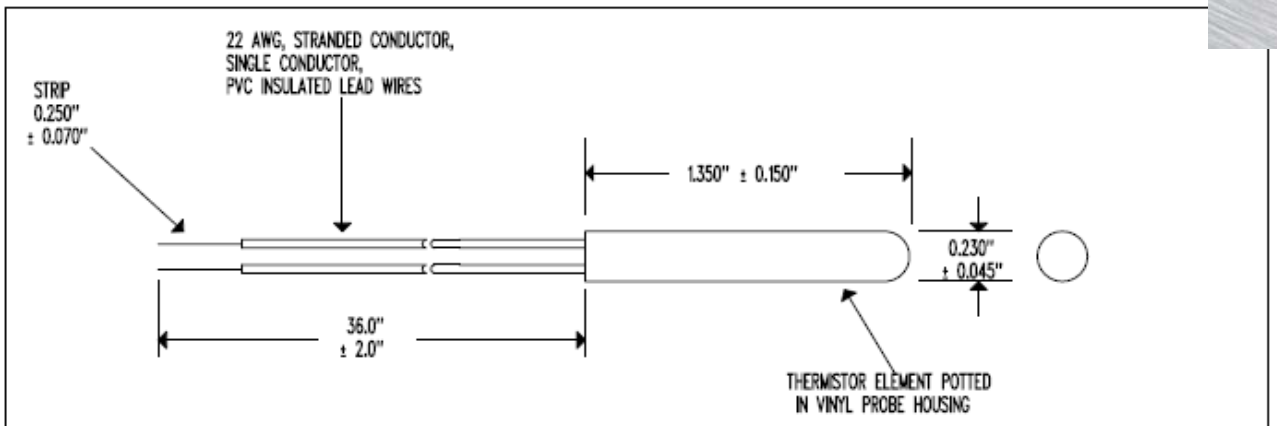
U.S. SENSOR CORP.
1832 W. COLLINS AVE.
ORANGE, CA. 92867
714-639-1000 www.ussensor.com

NTC THERMISTOR PROBE

P/N USP10975

- **± 1% Tolerance**
- **125°C Max Temp**
- **Kynar Insulated Lead Wire**
- **0.100” Diameter Plastic Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 10,000 Ω ± 1%
RESISTANCE/TEMPERATURE CURVE = "J"
TEMPERATURE COEFFICIENT @ +25°C = -4.4%/°C NOMINAL
BETA "B" (0 TO +50°C) = 3,892°K NOMINAL
MAXIMUM TEMPERATURE RATING = +80°C

MOISTURE RESISTANT PROBE ASSEMBLY

SEE MANUFACTURING SPECIFICATION (LAYER 1)

NONE	RELEASE TO PRODUCTION	04/02/10	DD
REV	REVISION RECORD	DATE	APP

SCALE	NONE
DRAWN BY	DAN DANKERT
DATE	04/02/10
REV.	NONE
LAYER	0 OF 2

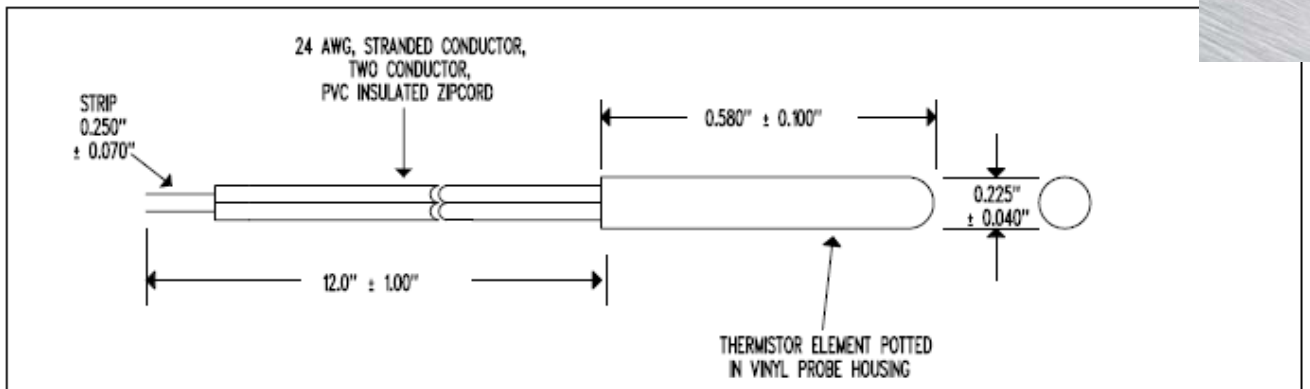
U.S. SENSOR CORP.
1832 W. COLLINS AVE.
ORANGE, CA. 92867
714-639-1000 www.ussensor.com

NTC THERMISTOR PROBE

P/N USP10982

- **± 1% Tolerance**
- **80°C Max Temp**
- **PVC Insulated Lead Wire**
- **0.230” Diameter Vinyl Housing**

U.S. SENSOR Corp.



RESISTANCE @ +25°C = 2,252 Ω NOMINAL
ACCURACY (0 TO +70°C) = ± 0.10°C
RESISTANCE/TEMPERATURE CURVE = "J"
BETA "β" (0 TO +50°C) = 3,892°K NOMINAL
TEMPERATURE COEFFICIENT @ +25°C = −4.4%/°C NOMINAL
MAXIMUM TEMPERATURE RATING = +105°C

MAXIMUM TEMPERATURE FOR BEST LONG TERM STABILITY = +75°C

*** ROHS COMPLIANT

SEE MANUFACTURING SPECIFICATION (LAYER 1)

NONE	RELEASE TO PRODUCTION	09/30/10	DD
REV	REVISION RECORD	DATE	APP

SCALE NONE	© COPYRIGHT U.S. SENSOR CORP. 714-639-1000 www.ussensor.com
DRAWN BY DAN DANKERT	NTC THERMISTOR PROBE
DATE 09/30/10	
REV. NONE	
LAYER 0 OF 2	P/N USP11493

- **± 0.1°C Accuracy**
- **105°C Max Temp**
- **PVC Insulated Zip Cord Lead Wire**
- **0.225” Diameter Vinyl Housing**