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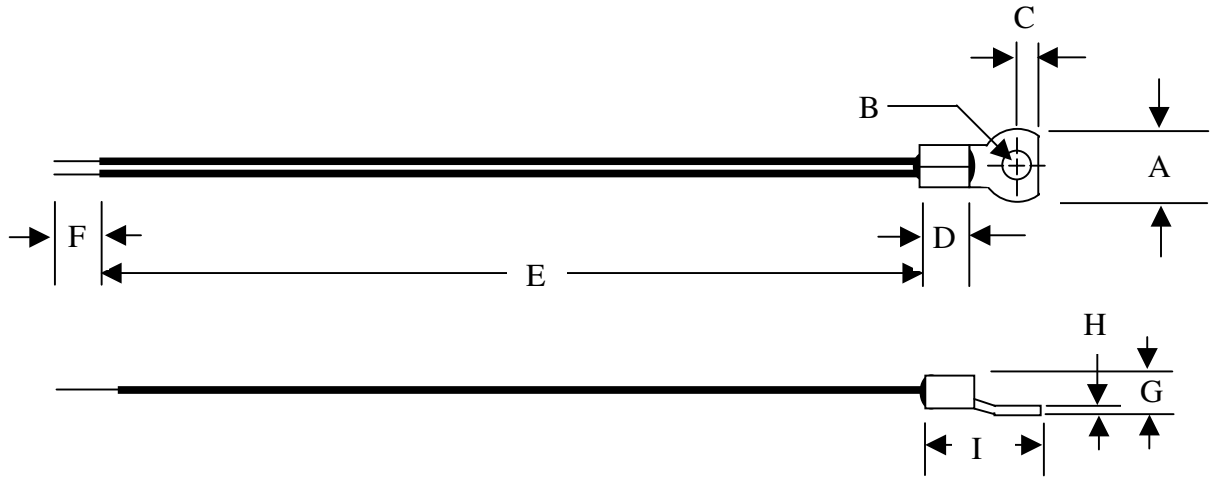
Part Number: PANR 103395-198



Electrical Specifications

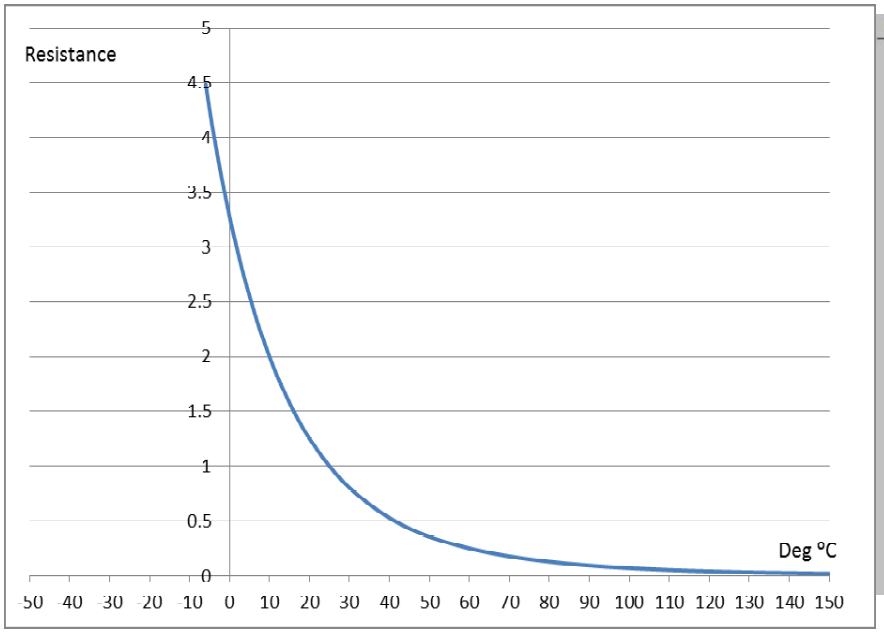
Resistance @ 25° C	**10 kΩ ±5%**
Temperature Coefficient of Resistance	**-4.40% / ºC**
Operating Temperature Range	**-50 ºC to 150 ºC**
Dissipation Constant	**3 mW / ºC**
Thermal Time Constant	**40 seconds**
Material Constant (Beta)	**3950 ºK ± 2 %**
ROHS Compliant	**Yes**
MSL (moisture sensitivity level)	**2**

Mechanical Specifications

A	**9.5mm ±0.1mm**
B	**Diameter 3.7mm ±0.1mm**
C	**2.54mm Nom**
D	**6.6mm ±0.5mm**
E	**150.0mm ±10.0mm**
F	**6.0 mm Nom**
G	**6.0mm ± 0.5mm**
H	**1.0mm ± 0.1mm**
I	**17.0mm Nom**
Lead Wire Gauge	**24 AWG solid Teflon Insulated**
Ring Lug	**#6 Stud**

Rev:	Date:	Change:
0	4/9/18	Issue

DRAWN BY: C. Terry		AMETHERM Circuit Protection Thermistors
DATE: 4/9/18	REV: 0	
ORIG. M.Samii	APPR: M. Samii	NTC THERMISTOR PROBE
SHEET 1 of 2		PANR 103395-198



Temperature Vs Resistance Curve

Deg C	R_T/R_{25}	Deg C	R_T/R_{25}	Deg C	R_T/R_{25}	Deg C	R_T/R_{25}	Deg C	R_T/R_{25}	Deg C	R_T/R_{25}
-50	66.9745	-15	7.3476	20	1.2515	55	0.2948	90	0.0924	125	0.0353
-49	62.3986	-14	6.9470	21	1.1960	56	0.2844	91	0.0897	126	0.0344
-48	58.1649	-13	6.5704	22	1.1432	57	0.2743	92	0.0870	127	0.0336
-47	54.2458	-12	6.2164	23	1.0931	58	0.2646	93	0.0845	128	0.0328
-46	50.6159	-11	5.8834	24	1.0454	59	0.2554	94	0.0820	129	0.0320
-45	47.2520	-10	5.5700	25	1.0000	60	0.2465	95	0.0796	130	0.0312
-44	44.1331	-9	5.2751	26	0.9568	61	0.2379	96	0.0773	131	0.0304
-43	41.2398	-8	4.9975	27	0.9157	62	0.2297	97	0.0751	132	0.0297
-42	38.5544	-7	4.7359	28	0.8766	63	0.2219	98	0.0729	133	0.0290
-41	36.0608	-6	4.4895	29	0.8393	64	0.2143	99	0.0708	134	0.0283
-40	33.7440	-5	4.2572	30	0.8038	65	0.2070	100	0.0688	135	0.0277
-39	31.5905	-4	4.0382	31	0.7700	66	0.2001	101	0.0669	136	0.0270
-38	29.5877	-3	3.8317	32	0.7378	67	0.1933	102	0.0650	137	0.0264
-37	27.7243	-2	3.6368	33	0.7071	68	0.1869	103	0.0632	138	0.0258
-36	25.9897	-1	3.4529	34	0.6778	69	0.1807	104	0.0615	139	0.0252
-35	24.3743	0	3.2791	35	0.6498	70	0.1747	105	0.0598	140	0.0246
-34	22.8691	1	3.1165	36	0.6232	71	0.1690	106	0.0581	141	0.0240
-33	21.4660	2	2.9628	37	0.5978	72	0.1634	107	0.0566	142	0.0235
-32	20.1574	3	2.8176	38	0.5735	73	0.1581	108	0.0550	143	0.0230
-31	18.9365	4	2.6802	39	0.5503	74	0.1530	109	0.0535	144	0.0224
-30	17.7969	5	2.5504	40	0.5282	75	0.1481	110	0.0521	145	0.0219
-29	16.7327	6	2.4275	41	0.5071	76	0.1433	111	0.0507	146	0.0215
-28	15.7384	7	2.3111	42	0.4869	77	0.1388	112	0.0494	147	0.0210
-27	14.8091	8	2.2010	43	0.4677	78	0.1344	113	0.0481	148	0.0205
-26	13.9402	9	2.0968	44	0.4492	79	0.1301	114	0.0468	149	0.0201
-25	13.1273	10	1.9980	45	0.4316	80	0.1261	115	0.0456	150	0.0196
-24	12.3666	11	1.9044	46	0.4148	81	0.1221	116	0.0444		
-23	11.6544	12	1.8157	47	0.3987	82	0.1183	117	0.0433		
-22	10.9874	13	1.7315	48	0.3833	83	0.1147	118	0.0422		
-21	10.3624	14	1.6518	49	0.3686	84	0.1111	119	0.0411		
-20	9.7765	15	1.5761	50	0.3545	85	0.1077	120	0.0400		
-19	9.2271	16	1.5043	51	0.3415	86	0.1045	121	0.0390		
-18	8.7118	17	1.4361	52	0.3291	87	0.1013	122	0.0381		
-17	8.2281	18	1.3714	53	0.3172	88	0.0982	123	0.0371		
-16	7.7741	19	1.3099	54	0.3058	89	0.0953	124	0.0362		

The general equation for measurement to reduce error in Temperature by using Stein Hart & Hart equation.

$$T = 1 / a + b (\text{Ln } R_T / R_{25}) + c\ b (\text{Ln } R_T / R_{25})^2 + d (\text{Ln } R_T / R_{25})^3$$

R_T / R_{25} Range	a	b	c	d
3.279 – 66.97	3.357296E-03	2.508334E-04	4.189372 E-06	-6.240867E-08
0.3507-3.363	3.354016E-0-3	2.541522 E-04	3.730922 E-06	-7.881561E-08
0.0637-0.3507	3.361395E-03	2.582266 E-04	5.885012 E-07	-2.823586 E-08
0.0169-0.0637	3.351295E-03	2.500181 E-04	-1.7255607 E-07	-4.356943 E-08

This equation is for Beta 3950 °K

R @0°C/ R@50°C = 9.20

R@25°C / R @125°C = 28.30

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