DELPHI

TEMPERATURE SENSOR

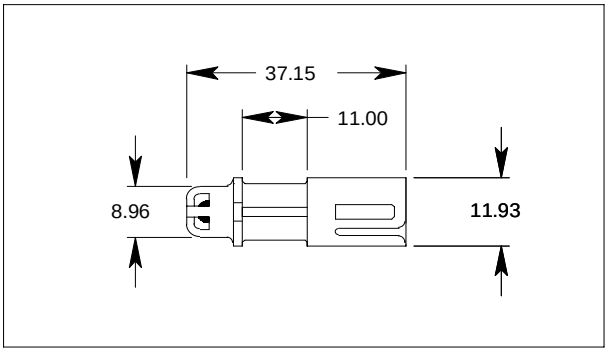
PRODUCT DATA

TRANSMISSION TEMPERATURE SENSOR

PART NUMBER 12129691

FEATURES:

- Design for Manufacturability
- Cost Effective
- Robust Design
- Few Components
- Few Assembly Processes
- Thermistor Technology
- 100% Calibration Certified



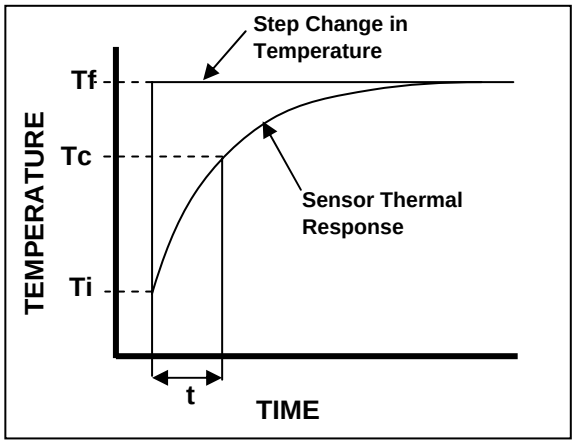
THERMAL & ELECTRICAL PROPERTIES

Typical Voltage Supply:	***5V DC***
Operating Temperature:	***-40 C to 135 C***
Resistive Range (Ohms):	***See Table***
Dissipation Constant: *	***12 mW/°C***
Thermal Time Constant: **	***5 seconds***
Accuracy:	***See Table***

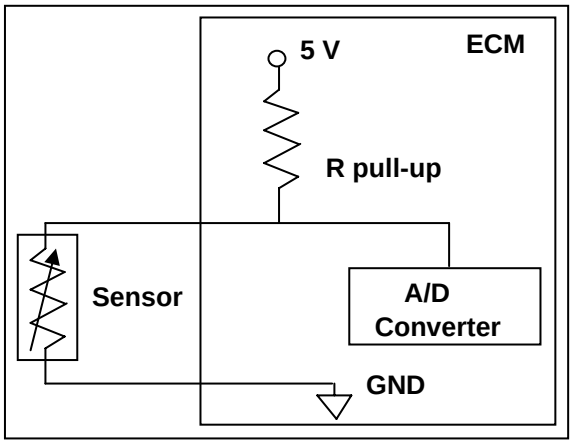
MECHANICAL PROPERTIES

Sensor Body Material:	***PA66***
Mating Connector & Seal:	***12047662***
Overall Wieght:	***2.8 g***
Color:	***Gray***

THERMAL TIME CONSTANT



CIRCUIT SCHEMATIC



* The ratio, at a specified ambient temperature, of the change in the power dissipation of the sensor to the resulant temperature change of the thermistor. Test medium: Dexron lle (ATF).

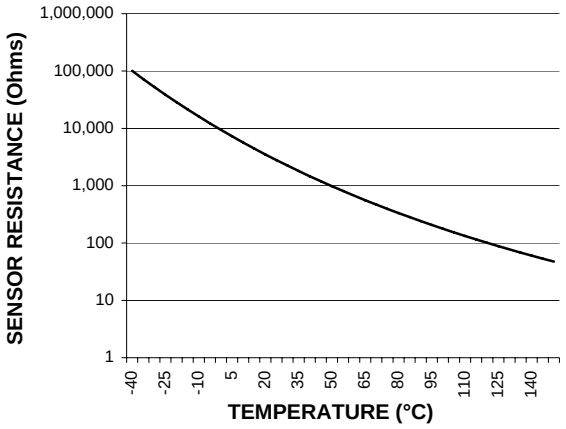
** The time required for the sensor to achieve 63.2% of its steady state value when subjected to a step change in ambient temperature [Tc=(Tf-Ti)*63.2%+Ti]. Test medium: Dexron lle (ATF).

Part Revision Level:	**B**
Data Sheet Revision Date:	**1/1/2001**

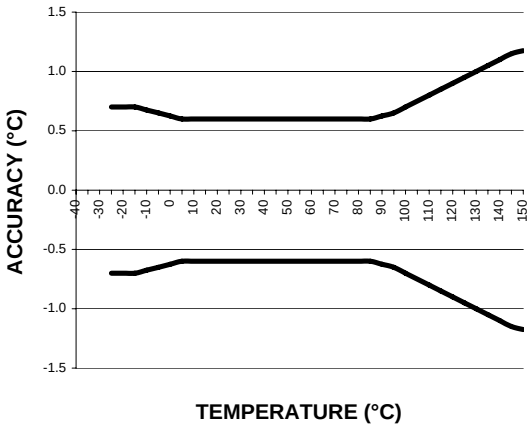
TEMPERATURE SENSOR

PRODUCT DATA

UNLOADED RESISTANCE vs TEMPERATURE CHARACTERISTIC CHART



TEMPERATURE ACCURACY CHART



Note: Temperature Sensor Calibration Resistance Guaranteed by 100% Automated Calibration Certification.

Temp (°C)	Res (Ohms)	Res (±%)	Ref Acc (±°C)	Temp (°C)	Res (Ohms)	Res (±%)	Ref Acc (±°C)	Temp (°C)	Res (Ohms)	Res (±%)	Ref Acc (±°C)
-40	100865	4.87	0.70	25	2795	2.50	0.60	90	241.8	2.10	0.70
-35	72437	4.64	0.70	30	2240	2.45	0.60	95	207.1	2.21	0.70
-30	52594	4.43	0.70	35	1806	2.40	0.60	100	178.0	2.31	0.80
-25	38583	4.21	0.70	40	1465	2.36	0.60	105	153.6	2.42	0.80
-20	28582	4.00	0.70	45	1195	2.31	0.60	110	133.1	2.52	0.90
-15	21371	3.80	0.70	50	980	2.27	0.60	115	115.7	2.61	0.90
-10	16120	3.60	0.60	55	809	2.23	0.60	120	100.9	2.68	1.00
-5	12261	3.40	0.60	60	671	2.19	0.60	125	88.3	2.75	1.00
0	9399	3.21	0.60	65	559	2.15	0.60	130	77.5	2.80	1.10
5	7263	3.06	0.60	70	469	2.11	0.60	135	68.3	2.84	1.10
10	5658	2.92	0.60	75	395	2.07	0.60	140	60.3	2.87	1.20
15	4441	2.78	0.60	80	334	2.04	0.60	145	53.4	2.89	1.20
20	3511	2.64	0.60	85	283	2.00	0.60	150	47.5	2.90	1.20

Important: The values above are for the unloaded thermistor, as shipped from Delphi Packard Electric, and does not reflect the effects of application system errors and aging.

Notes: Please contact Delphi Packard Engineering for the resistance vs temperature curve for your temperature sensor application. Due to self-heating effects of the thermistor, the resistance is dependant upon the application.

Since thermistors are "continuous function devices", resistance vs temperature data is available for numbers beyond those specified above.

For more information contact:

Delphi Packard Electric Systems
Sensor Business Segment M/S 93B
North River Road
Warren, OH 44483

Phone: (330) 373-3689

Fax: (330) 373-4147

Temperature (°C)	Resistance (Ohms)	Resistance (±%)	Temperature Accuracy (+°C)	(-°C)
-40	100,865	4.87	0.7	-0.7
-35	72,437	4.64	0.7	-0.7
-30	52,594	4.43	0.7	-0.7
-25	38,583	4.21	0.7	-0.7
-20	28,582	4.00	0.7	-0.7
-15	21,371	3.80	0.7	-0.7
-10	16,120	3.60	0.6	-0.6
-5	12,261	3.40	0.6	-0.6
0	9,399	3.21	0.6	-0.6
5	7,263	3.06	0.6	-0.6
10	5,658	2.92	0.6	-0.6
15	4,441	2.78	0.6	-0.6
20	3,511	2.64	0.6	-0.6
25	2,795	2.50	0.6	-0.6
30	2,240	2.45	0.6	-0.6
35	1,806	2.40	0.6	-0.6
40	1,465	2.36	0.6	-0.6
45	1,195	2.31	0.6	-0.6
50	980	2.27	0.6	-0.6
55	809	2.23	0.6	-0.6
60	671	2.19	0.6	-0.6
65	559	2.15	0.6	-0.6
70	469	2.11	0.6	-0.6
75	395	2.07	0.6	-0.6
80	334	2.04	0.6	-0.6
85	283	2.00	0.6	-0.6
90	241.8	2.10	0.7	-0.7
95	207.1	2.21	0.7	-0.7
100	178.0	2.31	0.8	-0.8
105	153.6	2.42	0.8	-0.8
110	133.1	2.52	0.9	-0.9
115	115.7	2.61	0.9	-0.9
120	100.9	2.68	1.0	-1.0
125	88.3	2.75	1.0	-1.0
130	77.5	2.80	1.1	-1.1
135	68.3	2.84	1.1	-1.1
140	60.3	2.87	1.2	-1.2
145	53.4	2.89	1.2	-1.2
150	47.5	2.90	1.2	-1.2

Unikeyic Electronics

Global Electronic Components Distributor

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211PL022S5049 33524083 PPI0001572 13963810 33500323 12077628-L 15326267 13782645
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