

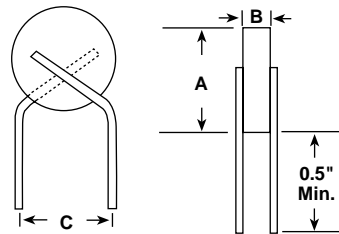
# PTC Switching Thermistors



## FEATURES

- Self-regulating heaters.
- Single phase motor starting.
- Over temperature protection.
- Air flow/liquid level sensing.
- Time delay.
- Degaussing.
- Arc suppression.
- Solid state fusing.

## STANDARD ELECTRICAL SPECIFICATIONS and DIMENSIONS in inches [millimeters]

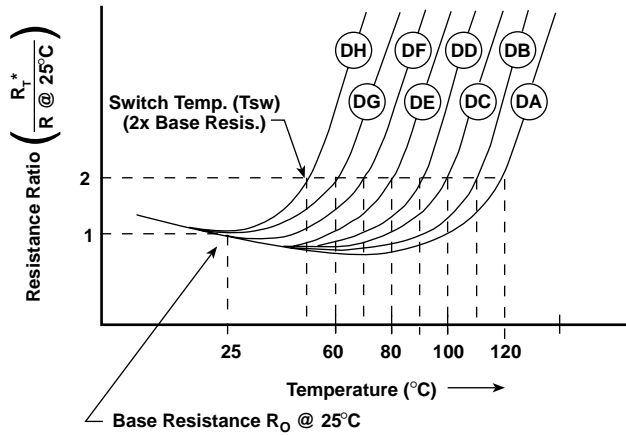


PART NUMBER	BASE RESISTANCE $R_o @ 25^{\circ}\text{C}$ ( $\Omega$ ) $\pm 30\%$	SWITCH TEMP. $T_{sw} \pm 5^{\circ}\text{C}$ (Curve)	MAXIMUM OPERATING VOLTAGE $V_{max}$	TIME CONSTANT $T_c$ (Sec)	DISSIPATION CONSTANT $D_c$ (mW/ $^{\circ}\text{C}$ )	REFERENCE DIMENSIONS (inches)			
						A	B	C	Lead Dia.
DP5504DA1R0N	1.0	120 (DA)	15	65	15	0.55	0.04	0.30	0.032
DP5004DA1R5N	1.5		20	55	14	0.50	0.04	0.30	0.032
DP5004DA2R0N	2.0		25	55	14	0.50	0.04	0.30	0.032
DP5004DA2R2N	2.2		25	50	12	0.50	0.04	0.30	0.025
DP4504DA3R3N	3.3		25	45	11	0.45	0.04	0.30	0.025
DP4005DA4R7N	4.7		35	45	10	0.40	0.05	0.30	0.025
DP4005DA5R0N	5.0		35	45	10	0.40	0.05	0.30	0.025
DP3505DA7R5N	7.5		50	40	9	0.35	0.05	0.25	0.020
DP3005DA100N	10.0		50	35	8	0.30	0.05	0.25	0.020
DP5010DA100N	10.0		132	75	15	0.50	0.10	0.30	0.025
DP3005DA200N	20.0		50	35	8	0.30	0.05	0.20	0.020
DP5010DA200N	20.0		132	85	16	0.50	0.10	0.30	0.032
DP2505DA250N	25.0		50	30	7	0.25	0.05	0.25	0.020
DP2505DA330N	33.0		50	30	7	0.25	0.05	0.20	0.020
DP3006DA500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP4510DA500N	50.0		132	55	12	0.45	0.10	0.30	0.025
DP2506DA750N	75.0		50	30	7	0.25	0.06	0.20	0.020
DP2005DA101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP2008DA251N	250.0		150	30	6	0.20	0.08	0.20	0.020
DP2010DA501N	500.0		250	30	6	0.20	0.10	0.20	0.020
DP5004DB2R2N	2.2	110 (DB)	25	50	12	0.50	0.04	0.30	0.025
DP4504DB3R3N	3.3		25	45	11	0.45	0.04	0.30	0.025
DP4005DB5R0N	5.0		35	45	10	0.40	0.05	0.30	0.025
DP3505DB7R5N	7.5		50	40	9	0.35	0.05	0.25	0.020
DP3005DB100N	10.0		50	35	8	0.30	0.05	0.25	0.020
DP5010DB100N	10.0		132	75	15	0.50	0.10	0.30	0.025
DP3005DB200N	20.0		50	35	8	0.30	0.05	0.20	0.020
DP5010DB200N	20.0		132	85	16	0.50	0.10	0.30	0.032



STANDARD ELECTRICAL SPECIFICATIONS									
PART NUMBER	BASE RESISTANCE $R_0$ @ 25°C ( $\Omega$ ) $\pm$ 30%	SWITCH TEMP $T_{sw} \pm 5^\circ\text{C}$ (Curve)	MAXIMUM OPERATING VOLTAGE $V_{max}$	TIME CONSTANT $T_c$ (Sec)	DISSIPATION CONSTANT $D_c$ (mW/°C)	REFERENCE DIMENSIONS (inches)			
						A	B	C	Lead Dia.
DP3510DB350N	35.0	110 (DB)	132	40	9	0.35	0.10	0.25	0.025
DP4510DB500N	50.0		132	55	12	0.45	0.10	0.30	0.025
DP2005DB101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP5010DB101N	100.0		265	75	15	0.50	0.10	0.30	0.025
DP2008DB251N	250.0		150	30	6	0.20	0.08	0.20	0.020
DP2010DB501N	500.0		250	30	6	0.20	0.10	0.20	0.020
DP2010DB152N	1500.0		350	30	6	0.20	0.10	0.20	0.020
DP4005DC5R0N	5.0	100 (DC)	35	45	10	0.40	0.05	0.30	0.025
DP3505DC7R5N	7.5		50	40	9	0.35	0.05	0.25	0.020
DP3005DC100N	10.0		50	35	8	0.30	0.05	0.25	0.020
DP5010DC100N	10.0		132	75	15	0.50	0.10	0.30	0.025
DP3005DC200N	20.0		50	35	8	0.30	0.05	0.20	0.020
DP5010DC200N	20.0		132	85	16	0.50	0.10	0.30	0.032
DP3510DC350N	35.0		132	40	9	0.35	0.10	0.25	0.025
DP3006DC500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP4510DC500N	50.0		132	55	12	0.45	0.10	0.30	0.025
DP2005DC101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP3005DD200N	20.0	90 (DD)	50	35	8	0.30	0.05	0.20	0.020
DP3006DD500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP2005DD101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP3005DE100N	10.0	80 (DE)	50	35	8	0.30	0.05	0.25	0.020
DP5010DE100N	10.0		132	75	15	0.50	0.10	0.30	0.025
DP3005DE200N	20.0		50	35	8	0.30	0.05	0.20	0.020
DP5010DE200N	20.0		132	85	16	0.50	0.10	0.30	0.032
DP3006DE500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP4510DE500N	50.0		132	55	12	0.45	0.10	0.30	0.025
DP2005DE101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP3005DF100N	10.0	70 (DF)	50	35	8	0.30	0.05	0.25	0.020
DP5010DF100N	10.0		132	75	15	0.50	0.10	0.30	0.025
DP3005DF200N	20.0		50	35	8	0.30	0.05	0.20	0.020
DP3510DF350N	35.0		132	40	9	0.35	0.10	0.25	0.025
DP3006DF500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP4510DF500N	50.0		132	55	12	0.45	0.10	0.30	0.025
DP5510DF500N	50.0		265	85	16	0.55	0.10	0.30	0.032
DP2005DF101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP5010DG100N	10.0	60 (DG)	132	75	15	0.50	0.10	0.30	0.025
DP3005DG200N	20.0		50	35	8	0.30	0.05	0.20	0.020
DP5010DG200N	20.0		132	85	16	0.50	0.10	0.30	0.032
DP3510DG350N	35.0		132	40	9	0.35	0.10	0.25	0.025
DP3006DG500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP4510DG500N	50.0		132	55	12	0.45	0.10	0.30	0.025
DP5510DG500N	50.0		265	90	16	0.55	0.10	0.30	0.032
DP2005DG101N	100.0		50	30	7	0.20	0.05	0.20	0.020
DP3005DH200N	20.0	50 (DH)	50	35	8	0.30	0.05	0.20	0.020
DP3006DH500N	50.0		50	35	8	0.30	0.06	0.25	0.020
DP2005DH101N	100.0		50	30	7	0.20	0.05	0.20	0.020

**STANDARD RESISTANCE RATIO - TEMPERATURE CURVES (Reference only)**

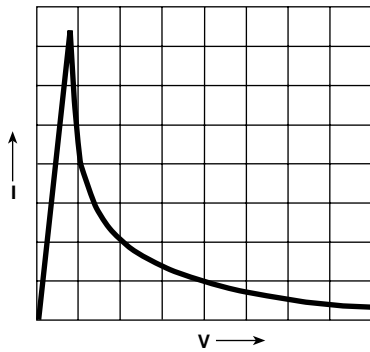


**RT CURVE-SWITCH TEMPERATURE (Tsw) RELATIONSHIP**

Curve	Switch Temperature (°C)
DH	50
DG	60
DF	70
DE	80
DD	90
DC	100
DB	110
DA	120

\*R<sub>T</sub> = Resistance at Specified Temperature (C°)

**STATIC VOLTAGE/CURRENT CURVE**



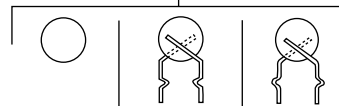
**CONFIGURATIONS**

**STANDARD**



No Leads

**OPTIONAL**



Inside Kink



Outside Kink

**PACKAGING**

— Bulk

**ORDERING INFORMATION**

DP5004DB2R2N  
MODEL

- 06  
MODIFICATION

- 01 No Leads
- 02 Inside Kink
- 03 Outside Kink
- 04 Epoxy Coating (150°C Max. Temp.)
- 05 Silicone Coating (200°C Max. Temp.)
- 06 Epoxy/Inside Kink
- 07 Epoxy/Outside Kink
- 08 Silicone/Inside Kink
- 09 Silicone/Outside Kink

**Example:** DP5004DB2R2N-06 (Standard part with epoxy coating and inside kink leads)

**NOTE:** If one of the modifications is required, add the dash number listed to the part number (see example). Other options are available including non-standard base resistance values and tolerances.