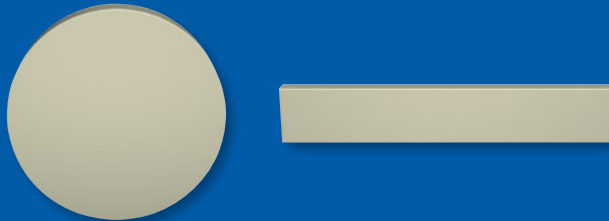




Sample Kit

PTC Thermistors

Heating elements
for high-voltage applications

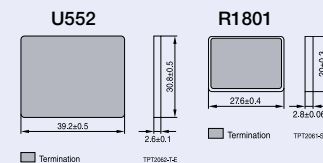
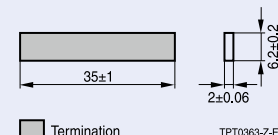
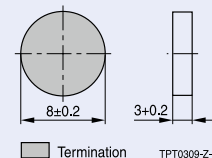


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PTC Thermistors – Heating elements for high-voltage applications

Type	T _{ref} (typ.) °C	R _{min} (V = V _R) V	T _{surf} ¹⁾ (V = V _R) °C	R _R (V _{meas} ≤ 1.5 V) V	V _{BD} V	Curvature mm	Ordering code	Dimensional drawing
V _{max} = 265 V AC, V _R = 230 V AC								
A53	110	960	135	4200 ±35%	500	< 0.2	B59053A0110A010	1
A53	150	700	170	4200 ±35%	500	< 0.2	B59053A0150A010	2
A53	180	530	200	4200 ±35%	500	< 0.2	B59053A0180A010	3
A53	220	640	235	6000 ±35%	500	< 0.2	B59053A0220A010	4
R102	50	225 ²⁾	100	700 ±50%	400	< 0.05	B59102R0050A010	5
R102	70	130	115	700 ±50%	400	< 0.05	B59102R0070A010	6
R102	110	100	145	700 ±50%	400	< 0.05	B59102R0110A010	7
R102	130	105	160	700 ±50%	400	< 0.05	B59102R0130A010	8
R102	150	90	180	700 ±50%	400	< 0.05	B59102R0150A010	9
R102	180	66	205	700 ±50%	400	< 0.05	B59102R0180A010	10
V _{max} = 750 V DC, V _R = 600 V DC								
U552	195	75 ... 225	225	Typical 1350	1000	< 0.05	B59552U0195B010	11
V _{max} = 870 V DC, V _R = 800 V DC								
R1801	180	390 ... 975 (@V _{max})	215	Typical 6800	1200	< 0.05	B59801R1180B010	12



Application examples:

- A53: Home appliances such as washing machine door locks, thermal actuators, insecticide and perfume vaporizers
- R102: Home appliances such as hair curlers, fan heaters, coffee machines, glue guns
- U552/R1801: Automotive applications such as cabin heating and battery heating

¹⁾ Measured between points, ²⁾ T (R_{PTC} = R_{min}) < 25 °C

Data sheets are available at:
www.tdk-electronics.tdk.com/ptc_heating
Content: 3 pcs per ordering code

Important information: It is incumbent on the customer to check and decide whether a product is suitable for use in a particular application. Our products are described in detail in our data sheets. Our *Important notes* and the product-specific *Cautions and warnings* must be observed. All relevant information is available through our sales offices.

1

A53
 $T_{\text{ref}} = 110\text{ }^{\circ}\text{C}$
 $R_R = 4200\text{ }\Omega$
B59053A0110A010

2

A53
 $T_{\text{ref}} = 150\text{ }^{\circ}\text{C}$
 $R_R = 4200\text{ }\Omega$
B59053A0150A010

3

A53
 $T_{\text{ref}} = 180\text{ }^{\circ}\text{C}$
 $R_R = 4200\text{ }\Omega$
B59053A0180A010

4

A53
 $T_{\text{ref}} = 220\text{ }^{\circ}\text{C}$
 $R_R = 6000\text{ }\Omega$
B59053A0220A010

5

R102
 $T_{\text{ref}} = 50\text{ }^{\circ}\text{C}$
 $R_R = 700\text{ }\Omega$
B59102R0050A010

6

R102
 $T_{\text{ref}} = 70\text{ }^{\circ}\text{C}$
 $R_R = 700\text{ }\Omega$
B59102R0070A010

7

R102
 $T_{\text{ref}} = 110\text{ }^{\circ}\text{C}$
 $R_R = 700\text{ }\Omega$
B59102R0110A010

8

R102
 $T_{\text{ref}} = 130\text{ }^{\circ}\text{C}$
 $R_R = 700\text{ }\Omega$
B59102R0130A010

9

R102
 $T_{\text{ref}} = 150\text{ }^{\circ}\text{C}$
 $R_R = 700\text{ }\Omega$
B59102R0150A010

10

R102
 $T_{\text{ref}} = 180\text{ }^{\circ}\text{C}$
 $R_R = 700\text{ }\Omega$
B59102R0180A010

11

U552
 $T_{\text{ref}} = 195\text{ }^{\circ}\text{C}$
 $R_{R,\text{typ}} = 1350\text{ }\Omega$
B59552U0195B010

12

R1801
 $T_{\text{ref}} = 180\text{ }^{\circ}\text{C}$
 $R_{R,\text{typ}} = 6800\text{ }\Omega$
B59801R1180B010