



# RADIAL LEAD RESIN COATED CHIP TYPE

This is a chip type thermistor used for temperature measurement and control, featuring high accuracy and fast response time.

## FEATURES

- Small, compact, and fast time response
- Easy to assemble
- Resistance and  $\beta$  constant tolerances over a wide temperature range
- Low cost, automated assembly

## APPLICATIONS

Precise temperature sensor for household appliances such as air conditioners and refrigerators.

## SPECIFICATIONS

Part Number	Resistance (25 $\Omega$ )	$\beta$ constant (25/50K)
TC210G34	1.0	3480
TC215G38	1.5	3830
TC220G39	2.0	3920
TC220G34	2.0	3400
TC222G33	2.18	3400
TC225G38	2.5	3830
TC225G39	2.5	3920
TC230G39	3.0	3920
TC240G35	4.0	3500
TC250G39	5.0	3920
TC310G39	10.0	3920
TC358G39	58.3	3950

\* The tolerance of resistance is  $\pm 2\%$  for standard device.

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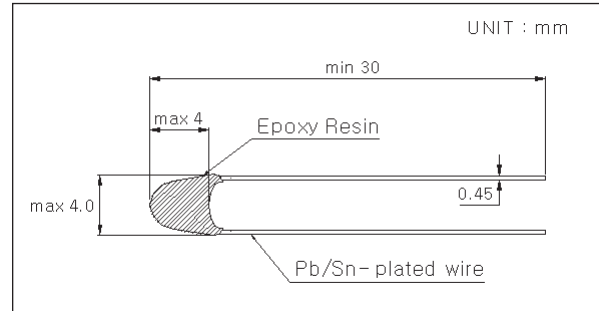
\* The  $\beta$  constant is determined by the equation :

$$\beta = 3853.9 \ln (R_{25}/R_{50})$$

R<sub>25</sub> and R<sub>50</sub> represent the thermistor resistance at 25 and 50 respectively.

\* For non-standard devices consult Thermometrics Global Business.

## DIMENSIONS



## CODE DESIGNATION

TC	310	G	39	G	B	U	EP
1	2	3	4	5	6	7	8

1- Shape of element : Chip Type

2- Resistance at 25°C : 310 =  $10 \times 10^3 = 10k\Omega$

3/5- Resistance & B constant tolerance : F:  $\pm 1\%$ ,  
G:  $\pm 2\%$ , H:  $\pm 3\%$  J:  $\pm 5\%$  K:  $\pm 10\%$ , L:  $\pm 15\%$ , M:  $\pm 20\%$ ,

4- B constant : 39:3900 – 3999 K 42:4200 – 4299 K

6- Reference Temperature : A: 0°C, B: 25°C, C: 50°C,  
D: 75°C, E: 85°C, F: 100°C, G: 150°C, H: 200°C

7- Lead wire : U: CU wire, P: CP wire, F: Frame Type

8- Shape of Product: EP: Epoxy Resin Coated, BC : Bare Chip

Dissipation constant	Time constant	Maximum Power Rating at 25°C	Operating Temperature Range
2.0 mW/°C	15(sec)	24mW	-40~110

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# PTC THERMISTOR FOR COLOR TV OR MONITOR DEGAUSSING

In the CRT of a color TV or monitor it is necessary to eliminate residual magnetization, formed in the metal parts of shadow mask caused by terrestrial magnetization or other magnetic fields. This is accomplished in the degaussing circuit by gradually reducing the current through the degaussing coil to a negligible level.

## FEATURES

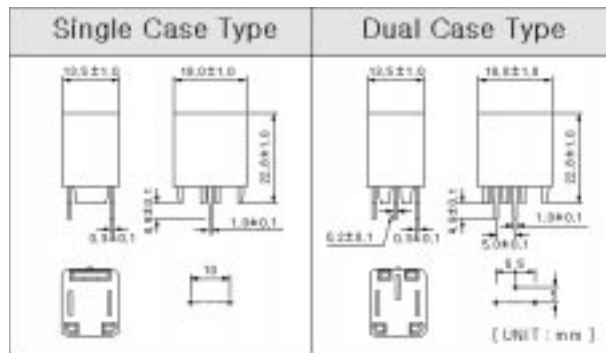
- Flame resisting housing, UL 94 V-0.
- Low cost.
- Large inrush and low residual current.
- Fast response

## CODE DESIGNATION

PT	11	P6	3	D	090	Q	290	S
1	2	3	4	5	6	7	8	9

1- Type : PTC Thermistor  
 2- Application & Style: 11=single case type, 12=dual case type  
 3- Curie Temp.: P5=50°C, P6=60°C  
 4- Specific Resistivity:  
 5- Resistance Temp. Coeff. ( $\alpha$ ) :  
 6- Nominal Resistance at 25°C : 90=90Ω, 140=140Ω  
 7- Resistance Tolerance: Q=±30/-20%, M=±20%  
 8- Max. Voltage: 290=290V  
 9- Special Model

## SHAPE AND DIMENSIONS



## SPECIFICATIONS

### SINGLE CASE TYPE

Part No.	Resistance	Rated Voltage (Vrms)	Maxi. Voltage (Vrms)	Withstand voltage (Vrms)	0 sec Ap-p min.	3 sec Ap-p max.	180 sec mAp-p max.	Applied Voltage (Vrms)	Coil Resistance (Ohm)
PT11P62D090Q290	9+30,-20%	220	290	355	18	.30	50	220	20.0
PT11P63D140M290	14±20%	220	290	355	25	.30	40	220	10.0
PT11P54D180M290	18±20%	220	290	355	25	.25	35	220	8.0

### DUAL CASE TYPE

Part No.	Resistance	Rated Voltage (Vrms)	Maxi. Voltage (Vrms)	Withstand voltage (Vrms)	0 sec Ap-p min.	3 sec Ap-p max.	180 sec mAp-p max.	Applied Voltage (Vrms)	Coil Resistance (Ohm)
PT12P62D090Q290	9+30,-20%	220	290	355	18	.30	7	220	20.0
PT12P63D140M290	14±20%	220	290	355	25	.12	8	220	10.0
PT12P54D180M290	18±20%	220	290	355	15	.12	8	220	13.0

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