

# MF5C drop sensor series

## ► FEATURES

- Multi-sealed structures are available according to different purposes
- High precision of resistance value and B value, good consistency, allowable exchange
- High sensitivity, quick reaction
- Wide temperature area, good stability and high reliability



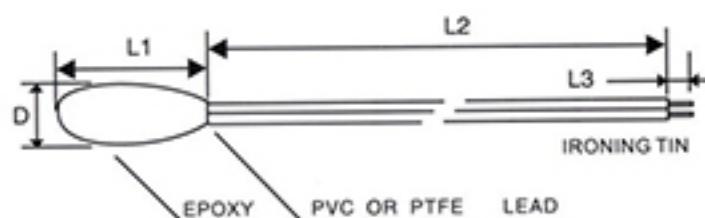
## ► PURPOSE

- Temperature measurement
- Temperature control
- Temperature compensation

## ► APPLICABLE SCOPE

- Specially applied to the temperature measurement and control of battery sets and home appliances

## ► EXTERIOR STRUCTURE AND SIZE



Unit: mm D, L1, L2, L3 Size can be made according to customers' requirements

## ► DESCRIPTION OF MODEL AND SPECIFICATIONS

K P D / MF5C - 1 0 3 G - 3 9 5 F

① ② ③ ④ ⑤ ⑥

- (1) Acronym of Kepengda
- (2) Sensor code
- (3) Nominal resistance value of thermistors, e.g. 103 expresses that the Nominal resistance value of the resistor is  $10 \times 10^3$  ( $\Omega$ )
- (4) Error of the resistance value of the thermistor (precision), e.g. G expresses that error of the resistance value (precision) is  $\pm 2\%$
- (5) Thermal-sensitivity index of the thermistor (material co-efficient)  $B_{25/50}$  Value, e.g. 395 expresses the material co-efficient  $B_{25/50}$  of the thermistor is  $395 \times 10(K)$
- (6) Error of  $B_{25/50}$  value (precision), e.g. F expresses that error of  $B_{25/50}$  value (precision) of the resistor is  $\pm 1\%$

Note: ①  $R_{25}$  precision: F( $\pm 1\%$ ); G( $\pm 2\%$ ); H( $\pm 3\%$ ); J( $\pm 5\%$ ); K( $\pm 10\%$ )  
②  $B_{25/50}$  value precision F( $\pm 1\%$ ); G( $\pm 2\%$ );

## ► MAIN TECHNICAL SPECIFICATIONS

Specification Name	Scope	Detection Conditions
$R_{25}$ (nominal resistance value)	500 $\Omega$ ~5 M $\Omega$	Constant temperature 25°C $\pm 0.05^\circ\text{C}$
$R_{25}$ Permissible variance (%)	$\pm 1$ , $\pm 2$ , $\pm 3$ , $\pm 5$	Constant temperature 25°C $\pm 0.05^\circ\text{C}$
$B_{25/50}$ (material coefficient)(thermal-sensitivity index)	3000~5000 K	Constant temperature 25°C $\pm 0.05^\circ\text{C}$ Constant temperature 50°C $\pm 0.05^\circ\text{C}$
$B_{25/50}$ value permissible variance (%)	$\pm 1$ , $\pm 2$	Constant temperature 25°C $\pm 0.05^\circ\text{C}$ Constant temperature 50°C $\pm 0.05^\circ\text{C}$
$\beta$ (dissipation coefficient)	$\geq 0.7\text{mw}/^\circ\text{C}$	Static in the air
T(thermal time constant)	$\leq 30\text{s}$	Static in the air
$T_A$ (working temperature)	-40°C ~ +105 °C	
$P_N$ (rated power)	$\leq 50\text{mw}$	Within working temperature