

## ● 特性 FEATURES

- \* 高互換精度  
High exchangeability
- \* 優良的可焊性及耐熱衝擊性  
Superior solderability and resistance to soldering heat shock
- \* 寬的工作溫度範圍-50 ~ +300°C  
The wide operation temperature ranges to +300°C from -50°C
- \* 耐濕性能優良  
Moisture resistant
- \* 低損耗小尺寸  
Low cost and small size
- \* 批量化生產保證了產品的高品質和高穩定性  
Excellent quality and high stability by mass production

## ● 用途 APPLICATIONS

- \* NTC溫度傳感器，手機電池，充電器，電飯煲，洗碗機，電烤箱，電子體溫計，電子萬年曆等。  
Temperature sensor , mobile cell, charger , electric cooker, dish washer , electric oven, electronic clinical thermometer, electronic perpetual calendar, and so on.

## ● 型號命名 PART NUMBERING

$\frac{FH}{①} - \frac{BWF}{②} \frac{XXX}{③} \frac{X}{④} \frac{XXXX}{⑤} \frac{X}{⑥} \frac{X}{⑦} - \frac{X}{⑧}$

① 風華公司標示記號 Guang doug Fenghua Advanced Technology(Holding) Co.,LTD code

② NTC玻封熱敏電阻器標示符號 Glass sealed thermistor code

③ 公稱電阻值 為25度時的數值 單位為歐姆 Rated zero-power resistance(  $R_{25}$  )

unit:  $\Omega$

前兩位數字表示電阻值的有效數字，第三位數字表示其后零的個數。

The first two are significant figure of resistance and the third one expresses number of following zeros

④ 電阻值公差符號 ( %) Tolerance of  $R_{25}$  ( %)

記號Code	F	G	H	J	X
電阻值公差 Tolerance of $R_{25}$	± 1.0	± 2.0	± 3.0	± 5.0	特殊公差 Specific tolerance

⑤ B值常數記號 B value Code

⑥ B值公差符號 ( %) Tolerance of B value( %)

記號Code	F	G	H	J	X
B值公差 Tolerance of B value	± 1.0	± 2.0	± 3.0	± 5.0	特殊公差 Specific tolerance

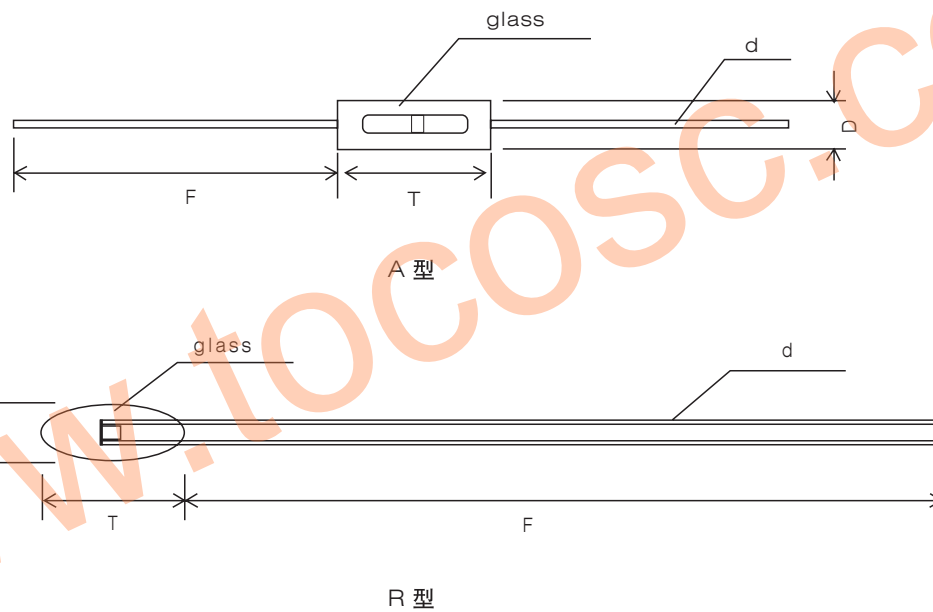
⑦ 計算B值溫度代碼 B value Temperature Code

記號 Code	A	B	C	D	E	F	G	H	M	N
兩溫度點 Temperature	25/50	25/85	0/25	0/50	0/100	0/80	25/100	-18/25	-20/25	5/25

⑧ 引綫記號 Lead Style code

記號 Code	A	R
引綫形式 Lead Style	軸向型 Axial	徑向型 Radial

• 外形尺寸 APPEARANCE AND DIMENSIONS



尺寸 ( mm ) Dimensions				引綫形式 Lead Style
T (max.)	D (max.)	F(max.)	d	
4.20	1.90	28.40	0.5	A
4.20	2.30	67.30	0.3	R

● 性能參數 PERFORMANCE PARAMETER

- \* 阻值範圍 (  $R_{25}$  ) : 0.5~200K $\Omega$   
Rated zero-power resistance (  $R_{25}$  ) : 0.5~200K $\Omega$
- \* 阻值精度:  $\pm 1\%$   $\pm 2\%$   $\pm 3\%$   $\pm 5\%$   
Resistance tolerance:  $\pm 1\%$   $\pm 2\%$   $\pm 3\%$   $\pm 5\%$
- \* B值範圍 ( B ) : 3200~4200K  
B value ( B ) : 3200~4200K
- \* B值精度:  $\pm 0.5\%$   $\pm 1\%$   $\pm 2\%$   $\pm 3\%$   
B value tolerance:  $\pm 0.5\%$   $\pm 1\%$   $\pm 2\%$   $\pm 3\%$
- \* 耗散系數 ( 静止空氣中25 $^{\circ}\text{C}$  ) : 2~4mw/ $^{\circ}\text{C}$   
Dissipation factor (in still air 25 $^{\circ}\text{C}$ ): 2~4mw/ $^{\circ}\text{C}$
- \* 熱時間常數 ( 静止空氣中 ) :  $\leq 20\text{sec}$   
Thermal time constant (in still air):  $\leq 20\text{sec}$
- \* 使用溫度範圍: -50~+300 $^{\circ}\text{C}$   
Operating temperature: -50~+300 $^{\circ}\text{C}$

● 產品系列 PRODUCT SERIES

型號規格 Part Number	標準電阻 $R_{25}$ ( k $\Omega$ ) Rated zero-power Resistance at 25 $^{\circ}\text{C}$	材料常數B B-Constant (K)	耗散系數 ( 25 $^{\circ}\text{C}$ ) ( mW/ $^{\circ}\text{C}$ ) Dissipation factor at 25 $^{\circ}\text{C}$	熱時間常數 ( S ) Thermal Time Constant	使用溫度範圍 ( $^{\circ}\text{C}$ ) Operating Temperature
A型	5	3274	2~4	$\leq 20$	-50~+300
FH-BWF502F3274FA-A	5	3470	2~4	$\leq 20$	-50~+300
FH-BWF502F3470FA-A	10	3470	2~4	$\leq 20$	-50~+300
FH-BWF103F3470FA-A	10	3700	2~4	$\leq 20$	-50~+300
FH-BWF103F3700FA-A	1.5	3850	2~4	$\leq 20$	-50~+300
FH-BWF152F3850FA-A	15	3950	2~4	$\leq 20$	-50~+300
FH-BWF153F3950FA-A	23	4200	2~4	$\leq 20$	-50~+300
FH-BWF233F4200FA-A	50	4055	2~4	$\leq 20$	-50~+300
FH-BWF503F4055FB-A	100	3990	2~4	$\leq 20$	-50~+300
FH-BWF104F3990FB-A	5	3274	2~4	$\leq 15$	-50~+300

## 高精度玻封NTC熱敏電阻器

## HIGH PRECISION GLASS SEALED THERMISTOR

型號規格 Part Number	標準電阻 $R_{25}$ (k $\Omega$ ) Rated zero-power Resistance at 25 $^{\circ}$ C	材料常數B B-Constant (K)	耗散系數 (25 $^{\circ}$ C) (mW/ $^{\circ}$ C) Dissipation factor	熱時間常數 (S) Thermal Time Constant	使用溫度範圍 ( $^{\circ}$ C) Operating Temperature Range
R型					
FH-BWF502F3274FA-R	5	3274	2~4	$\leq 15$	-50~+300
FH-BWF502F3470FA-R	5	3470	2~4	$\leq 15$	-50~+300
FH-BWF103F3470FA-R	10	3470	2~4	$\leq 15$	-50~+300
FH-BWF103F3700FA-R	10	3700	2~4	$\leq 15$	-50~+300
FH-BWF152F3850FA-R	1.5	3850	2~4	$\leq 15$	-50~+300
FH-BWF153F3950FA-R	15	3950	2~4	$\leq 15$	-50~+300
FH-BWF233F4200FA-R	23	4200	2~4	$\leq 15$	-50~+300
FH-BWF503F4055FB-R	50	4055	2~4	$\leq 15$	-50~+300
FH-BWF104F3990FB-R	100	3990	2~4	$\leq 15$	-50~+300

注：可根據用戶所需制作各種參數性能的高精度AT型NTCR產品

NOTE: We can design any kind of AT type NTC thermistors as your requirement.