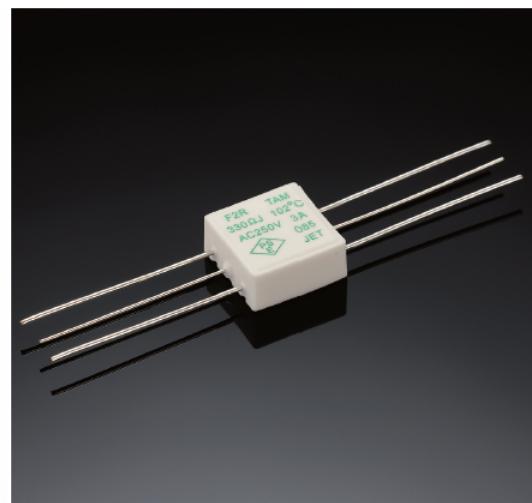


# F2R series Thermal-Links/Resistor Assemblies

F2R系列 溫度保險絲附電阻器

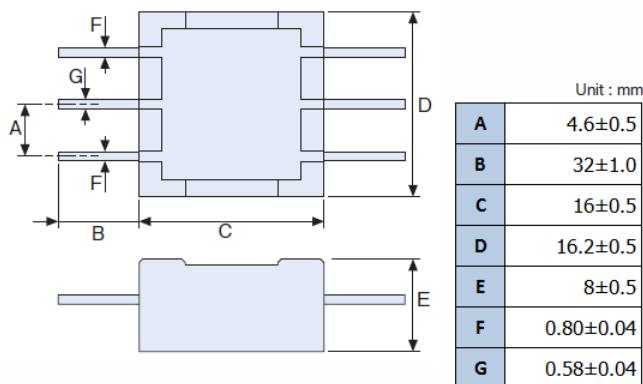


- The thermal-links for pellet type is a product that combines one and two 2W resistance elements.
- F2R is RoHS compliance product, non-Pb and non-Cd contains.
- F2R got excellent interception characteristic when abnormality overload happened.
- It is the best for the circuit protection of an electric carpet and an electric blanket.
- 由 1 個顆粒型溫度保險絲和 2 個 2W 電阻元素組成一體的製品。
- F2R 是不含鉛、鎘的製品。 (RoHS 對象製品)
- F2R 能在超負荷等異常時，發揮它的優越切斷特性。
- 最適合於電熱地毯和電熱毯子的電路保護。

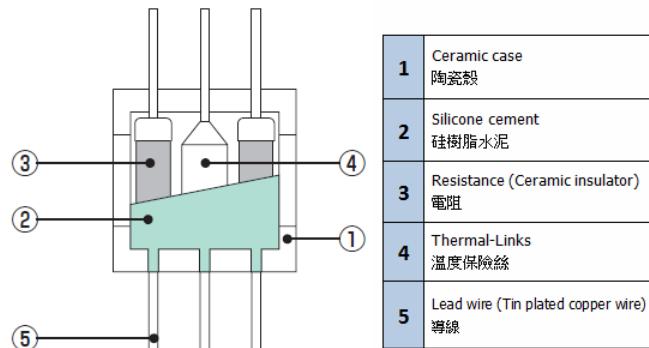


✓ Approved by PSE ✓ 已通過認證:PSE

## Dimension 尺寸



## Construction 構造圖



## Models Component 型號構成

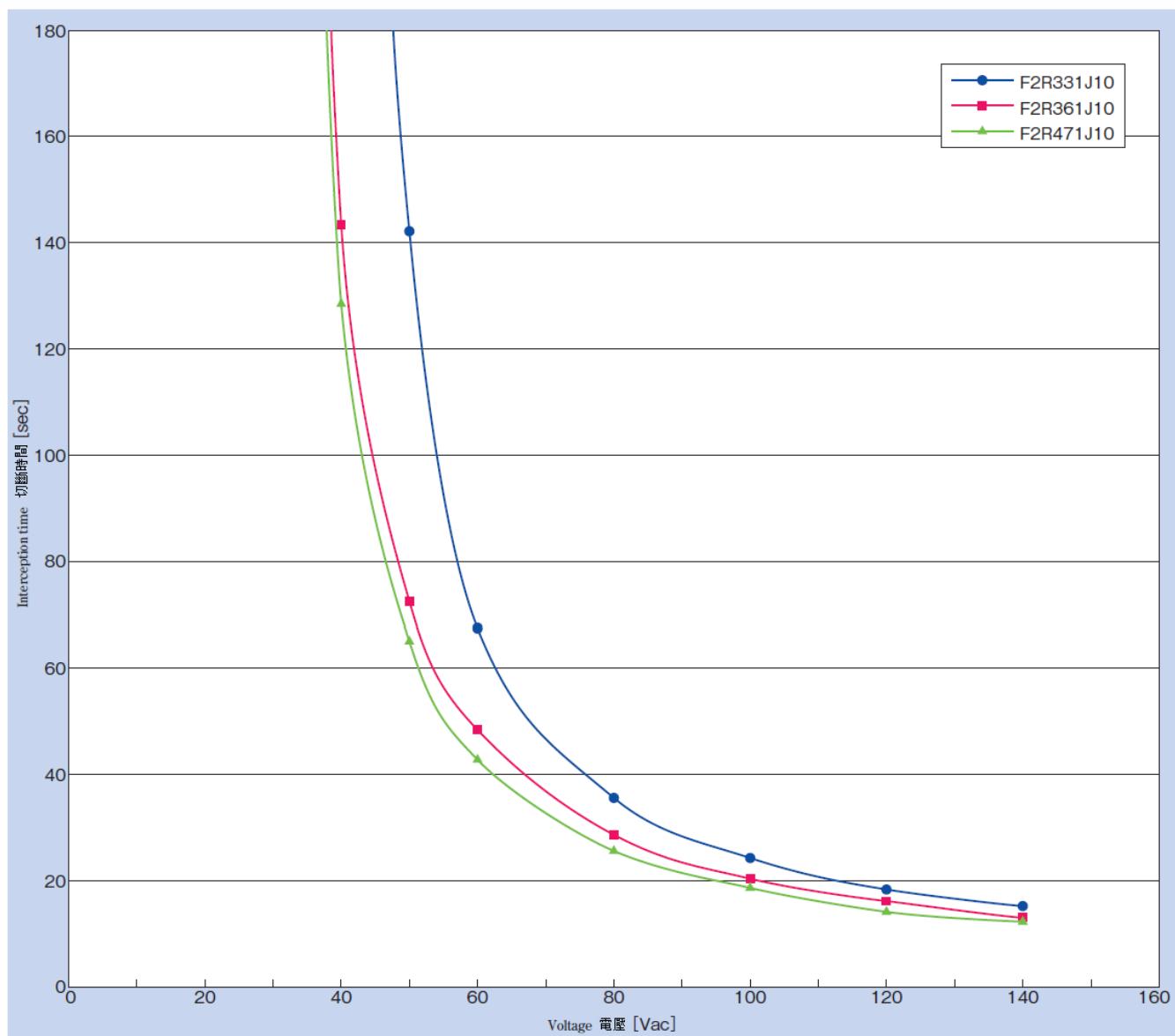
**F2R**          **J** **10**

Series  
系列名    Nominal resistance value  
額定電阻值    Resistance tolerance  
電阻值容許偏差 **J:±5%**    Thermal-Links **10:Tf 102°C**  
溫度保險絲

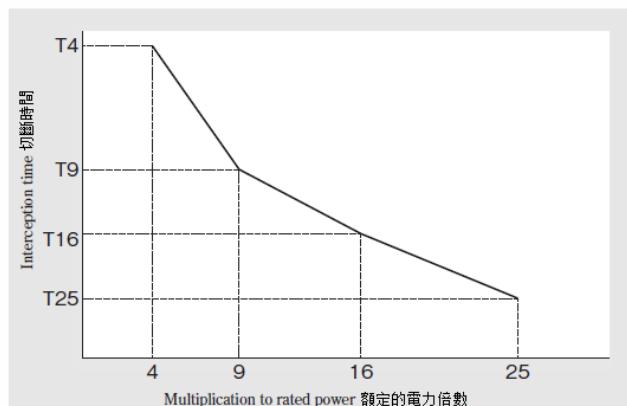
## Ratings 頒定

Model Name 型號	Rated power (25°C)	Nominal resistance value 額定電阻值	Resistance tolerance 電阻值容許偏差	Thermal-Links 溫度保險絲				PSE	UL C-UL	TUV
				Model Name 型號	Rated functioning temp. 額定動作溫度 (Tf)	Rated voltage 額定電壓	Rated current 額定電流			
<b>F2R□□□J10</b>	2W/1 元素	330~1.5kΩ	± 5%	V2F	102°C	AC250V	3A	○	—	—

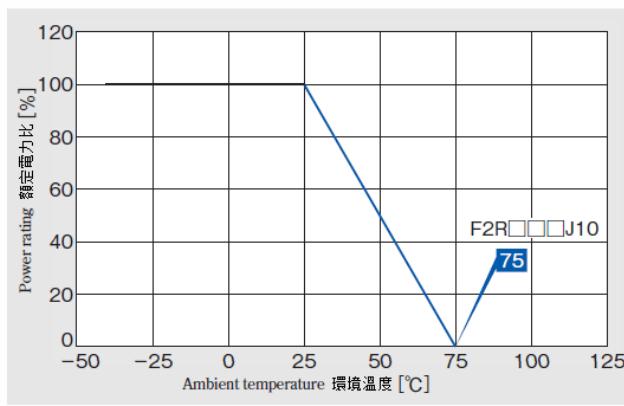
## Interception Characteristics 切斷特性



Interception Time vs. Wattage 切斷性能



Derating Curve 降低負荷曲線



Interception time— max sec. 切斷時間(秒以内)

T4	T9	T16	T25
1 hour or less 1小時以内	90	55	40

## Performance 其他性能

Test Characteristics 切斷時間(秒以內)	Test Methods 試驗方法			Specifications 規格									
Resistance value 電阻值	<p>The following DC voltage is applied across lead terminals for measurements. 導線端子間施加下表的直流電壓進行測定。</p> <table border="1"> <thead> <tr> <th colspan="2">Nominal resistance range 額定電阻值範圍</th> <th>Max. applied Voltage 最高承受電壓</th> </tr> </thead> <tbody> <tr> <td>1 and over 1 以上</td> <td>less than 10 10 未滿</td> <td>0.3</td> </tr> <tr> <td>10 and over 10 以上</td> <td>less than 100 100 未滿</td> <td>1</td> </tr> </tbody> </table>			Nominal resistance range 額定電阻值範圍		Max. applied Voltage 最高承受電壓	1 and over 1 以上	less than 10 10 未滿	0.3	10 and over 10 以上	less than 100 100 未滿	1	Resistance shall be within $\pm 5\%$ of nominal resistance value. 在 $\pm 5\%$ 以內
Nominal resistance range 額定電阻值範圍		Max. applied Voltage 最高承受電壓											
1 and over 1 以上	less than 10 10 未滿	0.3											
10 and over 10 以上	less than 100 100 未滿	1											
Functioning temperature 動作溫度	<p>Soaking the product in the oil bath of temperature rising at 0.5°/per min. Then measure the temperature of oil. The measure beginning temperature is -20°C of rated functioning temperature, and the detection current is assumed to be 10mA or less. 製品在每分鐘 0.5°C 的油槽中，製品動作時油槽內溫度的測定。 測定開始定額溫度為-20°C，檢測電流在 10mA 以下。</p>			F2R□□□J10; 102+0-7°C									
Insulation resistance 絕緣電阻	Between body and lead terminals 主體、導線端子間	<p>DC500V is impressed and measured between metallic foil wrapped on the case, and lead terminals. 在水泥殼上的金屬箔與導線端子間施加 DC500V 進行測定。</p>			Insulation resistance shall be 1000MΩ or above. 在 1000MΩ 以上								
	Between body lead terminals 兩根導線端子間	<p>DC500V is impressed for and measured between lead terminals after functioning temperature test. 動作溫度試驗後，導線端子間施加 DC500V 進行測定。</p>			Insulation resistance shall be 0.2MΩ or above. 在 0.2MΩ 以上								
Dielectric strength 耐電壓	Between body and lead terminals 主體、導線端子間	<p>AC1.5kV is impressed for 1 minute and measured between metallic foil wrapped on the case, and lead terminals. (Cutoff current 0.5mA) 在水泥殼上的金屬箔與導線端子間施加 AC1.5kV 進行 1 分鐘測定。(檢測電流 0.5mA)</p>			The products shall withstand for 1 minute. 能承受 1 分鐘								
	Between body lead terminals 兩根導線端子間	<p>AC500V is impressed for 1 minute and measured between lead terminals after functioning temperature test. (Cutoff current 0.5mA) 動作溫度試驗後，導線端子間施加 AC500V 進行 1 分鐘測定。(檢測電流 0.5mA)</p>			The products shall withstand for 1 minute. 能承受 1 分鐘								
Temperature coefficient of resistance 電阻溫度系數	Room temperature / 70°C up 室溫 / 70°C 以上			$\pm 250\text{ppm}/^{\circ}\text{C}$									
Short time overload 短時間過負荷	Rated power $\times 10$ , for 5 sec. 額定電力 $\times 10$ 倍，承受 5 秒鐘			$\pm(2\%+0.05\Omega)$									
Soldering heatproof 焊接耐熱性	265°C $\pm 5^{\circ}\text{C}$ , 5 sec.			$\pm(1\%+0.05\Omega)$									
Terminal strength 端子強度	<p>Pull: 20N, 1 min. Bending: 90°C, 1 cycle 拉力: 20N, 1 分鐘 扭曲: 90°C, 1 週期</p>			No mechanical damages 無斷線、鬆動、破損									
Humidity resistance 耐濕性	40°C, Humidity 90~95%RH, 10000 hours 40°C, 濕度 90~95%RH, 10000 小時			$\pm(2\%+0.05\Omega)$									
Load life 負荷壽命特性	Rating load 1000 hours, 1.5 hours ON / 0.5 hours OFF cycle 額定負荷 1000 小時，1.5 小時開/0.5 小時關的週期			$\pm(3\%+0.05\Omega)$									