ZMZ11B Series

PTC THERMISTOR/ VARISTR COMPLEX 熱敏/壓敏復合電阻器

用于高端電子鎮流器/節能燈零溫度、零功耗預熱啓動
-For Preheating of the High Property Ballast/CFL(Zero Thermal/Zero Power Dissipation)

產品特點FEATURES

- ZMZ11B 系列熱敏/壓敏復合電阻器是應若幹國際知名廠商特別要求，轉爲高端電子鎮流器 / 節能燈設計的一種零功耗、零溫升型預熱啓動元件。
- ZMZ12E 系列PTC熱敏電阻作爲電子鎮流器 / 節能燈陰極預熱啓動技術的首選方案，終究存在一個固有缺陷：獨立的熱敏元件始終有功耗、有溫升。對高性能電子鎮流器 / 節能燈而言，最大限度地降低其陰極預熱啓動元件所產生的功耗及溫升是工程師們孜孜以求的工作目標。ZMZ11B系列零功耗、零溫升預熱啓動電阻器稱得上是繼ZMZ11A系列以後，電子鎮流器/節能燈工程師與敏感元件工程師攜手合作的又一智慧結晶。ZMZ11B系列是一種由一個PTC熱敏電阻R_t和一個壓敏電阻R_V串聯而成的復合元件。啓動時，電壓高于R_V壓敏電壓，R_V處于導通狀態，其預熱啓動過程基本上是由R_t來獨立完成的。燈管啓動點亮處于正常工作以後，R_V端電壓迅速降低到其壓敏電壓以下，R_V躍居高阻態，斷開R_t，從而使零功耗、零溫升預熱啓動得以實現。
- ZMZ11B系列R_t部分之選型與ZMZ11A系列基本類似，壓敏電阻R_V部分之選型主要考慮R_V壓敏電壓應略高于燈管電壓、R_V通流容量應足以應對重復通斷的啓動電流的頻繁衝擊。

- ZMZ11B series thermistors/varistor complex is designed specially for preheating of the high property Ballast/CFL(zero-thermal/zero power dissipation)according to the special inquiry of several international famous manufactures of lighting.
- As the first choice of preheating of Ballast/CFL,ZMZ11A series PTC thermistors has an intrinsic drawback: the independent thermal component always has power dissipation and thermal. To the high property CFL/Ballast, decreasing the power dissipation and thermal as possible as it can is very important. It’s also the engineer’s goal.ZMZ11B series is another co-operative fruit of the components engineers and the CFL/Ballast engineers after ZMZ11A.ZMZ11B series is a kind of complex components, which includes a thermistor Rt and a varistor Rv in series. When the voltage of the circuit is higher than Rv’s varistor voltage at starting, Rv is at short state. So the process of preheating is finished almost by Rt independently. After the tube lights and works normally, the Rv’s voltage will decrease quickly to the level under its varistor voltage, then Rv will change into high-resistance state. So Rt will be at open state and the preheating which is zero thermal/zero power dissipation will be realized.
- The specification of ZMZ11B series’s Rt is similar to ZMZ11A series. While as to the specification of Rv, two things must be considered: Rv’s varistor voltage must be higher than tube’s voltage;Rv’s Max Peak Current must be able to endure the inrush of Repetitive Turn Over Current.

HOW TO ORDER

ZMZ11B 105 S 102 N S U B 0 05D 121 K N

- ZMZ11B：系列Series
- 105：PTC熱敏電阻規格參數（與ZMZ12E系列類似）Spec.of PTC Thermistor (Simlar as ZMZ12E series)
- S：
- 102：
- N：
- S：
- U：
- B：
- 0：
- 05D：Size of Varistor 壓敏電阻尺寸：05D=φ5,07D=φ7,10D=φ10
- 121：Varistor Vol.&Tol.of Varistor 壓敏電阻的壓敏電壓及其允差範圍：820=82V,101=100V,121=120V,151=150V,
- K：K=±10%,J=±5%.
- N：N：符合ROHS要求 N：Compliance with ROHS directive

規 格 Specifications

No. 序號	Rated zero-power resistance 額定零功率電阻 R_N(Ω)	Curie Temp. 居裏溫度 Tc(℃)	Varistor Voltage 壓敏電壓Vv (V) (at 1mA)	Max.Permissible Repetitive Turn Over Current 最大可重復通斷電流 Imax(mA)	Dimensions外形尺寸 (mm)			
					Dmax	Tmax	d ±0.1	F ±1
1	680±30%	50±7	100±10% 120±10% 150±10% 180±10% 200±10%	200	6.0	6.5	0.6	5.0
2	1000±30%							
3	1500±30%							
4	2200±30%							
5	3300±30%							
6	470±30%	75±7	100±10% 120±10% 150±10% 180±10% 200±10%	200	6.0	6.5	0.6	5.0
7	680±30%							
8	1000±30%							
9	1500±30%							
10	2200±30%							
11	3300±30%							

PTC THERMISTOR /VARISTOR COMPLEX

規 格 Specifications

No. 序號	Rated zero-power resistance 額定零功率電阻 RN(Ω)	Curie Temp. 居裏溫度 Tc(℃)	Varistor Voltage 壓敏電壓Vv (V) (at 1mA)	Max.Permissible Repetitive Turn Over Current 最大可重復通斷電流 Imax(mA)	Dimensions外形尺寸 (mm)			
					Dmax	Tmax	d ±0.1	F ±1
12	470±30%	105±7	100±10% 120±10% 150±10% 180±10% 200±10%	200	6.0	6.5	0.6	5.0
13	680±30%							
14	1000±30%							
15	1500±30%							
16	2200±30%							
17	3300±30%							
18	470±30%	105±7	200±10% 270±10% 330±10% 300±10% 390±10%	200	8.5	6.5	0.6	5.0
19	680±30%							
20	1000±30%							
21	1500±30%							
22	2200±30%							
23	470±30%	75±7	100±10% 120±10% 150±10% 180±10% 200±10%	300	6.0	6.5	0.6	5.0
24	680±30%							
25	1000±30%							
26	1500±30%							
27	2200±30%							
28	470±30%	85±7	100±10% 120±10% 150±10% 180±10% 200±10%	300	6.0	6.5	0.6	5.0
29	680±30%							
30	1000±30%							
31	1500±30%							
32	2200±30%							
33	470±30%	85±7	150±10% 200±10% 240±10% 270±10% 330±10%	300	8.5	6.5	0.6	5.0
34	680±30%							
35	1000±30%							
36	1500±30%							
37	2200±30%							
38	470±30%	75±7	150±10% 200±10% 240±10% 270±10% 330±10%	300	8.5	6.5	0.6	5.0
39	680±30%							
40	1000±30%							
41	1500±30%							
42	2200±30%							
43	470±30%	75±7	200±10% 240±10% 270±10% 330±10%	300	11.5	6.5	0.6	7.5
44	680±30%							
45	1000±30%							
46	1500±30%							
47	470±30%	105±7	200±10% 240±10% 270±10% 330±10%	300	8.5	6.5	0.6	5.0
48	680±30%							
49	1000±30%							
50	1500±30%							
51	470±30%	105±7	200±10% 240±10% 270±10% 330±10%	300	11.5	6.5	0.6	7.5
52	680±30%							
53	1000±30%							
54	1500±30%							
55	330±30%	85±7	200±10% 240±10% 270±10% 330±10%	300	8.5	6.5	0.6	7.5
56	470±30%							
57	680±30%							
58	1000±30%							
59	330±30%	85±7	200±10% 240±10% 270±10% 330±10%	300	11.5	6.5	0.6	7.5
60	470±30%							
61	680±30%							
62	1000±30%							