

WMZ11

1.應用範圍:

WMZ11A 型 PTC 熱敏電阻用於各種螢光燈電子鎮流器、電子節能燈中,不必改動線路,將適當的熱敏電阻直接中跨接在燈管的諧振電容器兩端,可以變電子鎮流器、電子節能燈的硬啟動為預熱啟動,使燈絲的預熱時間達 0.4~2 秒可延長燈管壽命三倍以上。

2.特點:

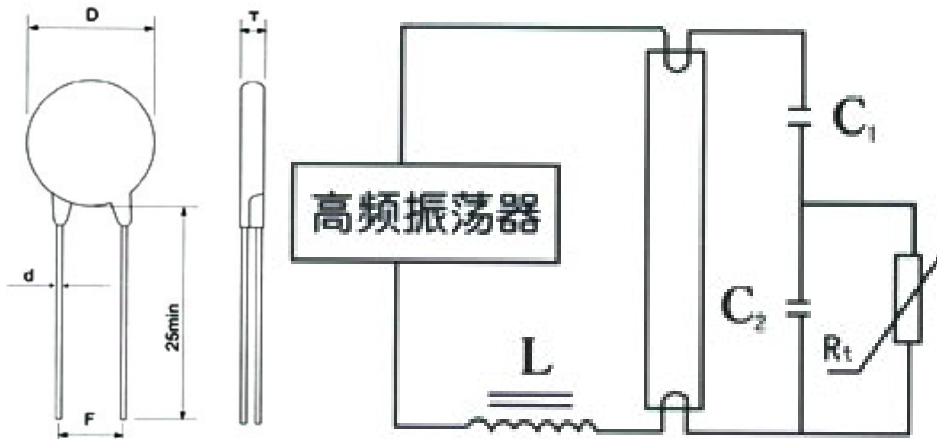
WMZ11A 型 PTC 熱敏電阻利用材料 PTC 特性製作而成,產品體積小、耐電壓高、壽命長、正常工作時功耗小。

3.應用原理:

WMZ11A 型 PTC 熱敏電阻應用 PTC 熱敏電阻實現預熱啟動原理如右圖所示: 剛接通開關時, R_t 處於常溫態,其阻值遠遠低於 C_2 阻值,電流通過 C_1 , R_t 自熱溫度超過居裏點溫度 T_c 躍入高阻態,其阻值遠遠高於 C_2 阻值,電流通過 C_1 、 C_2 形成回路導致 LC 諧振,產生高壓點亮燈管。

4.外型結構和尺寸:

5.應用電路圖



6.產品標誌說明:



注:

①型號:

②開關溫: 50-50°C; 75-75°C; 85-85°C; 105-105°C; 120-120°C

③類型代號: S-微型型; A-基本型; HV-高壓型

④額定零功率電阻: 102-1000 Ω; 68R-68 Ω

⑤電阻允差: N-±30%; V-±25%; M-±20%; K-±10%; X-其他

⑥引線形狀: U-內彎; S-直形; A-軸彎

| 類型代號 | Dmax | Tmax | F±1 | d±0.05 |
|------|------|------|-----|--------|
| S | 4 | 4.5 | 5 | 0.5 |
| L | 5 | 4.5 | 5 | 0.6 |
| A | 6 | 4.5 | 5 | 0.6 |
| HV | 6 | 5 | 5 | 0.6 |
| B | 8 | 4.5 | 5 | 0.6 |
| BHV | 8 | 5 | 5 | 0.6 |

主要技術參數

| 序號 | 型號 | 額定零功率電阻值 (Ω) | 耐電壓 (VAC) | 最大可重複通斷電流 (mA) | 耐流能力 (mA) | 開關溫度 (°C) | 外形尺寸 (mm) | | |
|----|-----------------|--------------|-----------|----------------|-----------|-----------|-----------|------|-----|
| | | | | | | | Dmax | Tmax | d |
| 01 | WMZ11A-50S68RNU | 68±30% | 360 | 200 | 300 | 50±7 | 4 | 4.5 | 0.5 |
| 02 | WMZ11A-50S101NU | 100±30% | 400 | | | | | | |
| 03 | WMZ11A-50S151NU | 150±30% | 400 | | | | | | |

| | | | | | | | | | |
|----|------------------|----------|-----|-----|-----|--|--|--|--|
| 04 | WMZ11A-50S221NU | 220±30% | 500 | | | | | | |
| 05 | WMZ11A-50S331NU | 330±30% | 600 | | | | | | |
| 06 | WMZ11A-50S471NU | 470±30% | 600 | | | | | | |
| 07 | WMZ11A-50S681NU | 680±30% | 600 | | | | | | |
| 08 | WMZ11A-50S102NU | 1000±30% | 600 | | | | | | |
| 09 | WMZ11A-50S152NU | 1500±30% | 600 | 140 | 210 | | | | |
| 10 | WMZ11A-50S222NU | 2200±30% | 600 | 90 | 135 | | | | |
| 11 | WMZ11A-50S332NU | 3300±30% | 600 | 60 | 90 | | | | |
| 12 | WMZ11A-50S472NU | 4700±30% | 600 | 40 | 60 | | | | |
| 13 | WMZ11A-75S68RNU | 68±30% | 360 | | | | | | |
| 14 | WMZ11A-75S101NU | 100±30% | 400 | | | | | | |
| 15 | WMZ11A-75S151NU | 150±30% | 400 | | | | | | |
| 16 | WMZ11A-75S221NU | 220±30% | 500 | 200 | 300 | | | | |
| 17 | WMZ11A-75S331NU | 330±30% | 500 | | | | | | |
| 18 | WMZ11A-75S471NU | 470±30% | 500 | | | | | | |
| 19 | WMZ11A-75S681NU | 680±30% | 600 | | | | | | |
| 20 | WMZ11A-75S102NU | 1000±30% | 600 | | | | | | |
| 21 | WMZ11A-75S152NU | 1500±30% | 600 | 140 | 210 | | | | |
| 22 | WMZ11A-75S222NU | 2200±30% | 600 | 90 | 135 | | | | |
| 23 | WMZ11A-75S332NU | 3300±30% | 600 | 60 | 90 | | | | |
| 24 | WMZ11A-75S472NU | 4700±30% | 600 | 40 | 60 | | | | |
| 25 | WMZ11A-105S68RNU | 68±30% | 360 | | | | | | |
| 26 | WMZ11A-105S101NU | 100±30% | 400 | | | | | | |
| 27 | WMZ11A-105S151NU | 150±30% | 400 | | | | | | |
| 28 | WMZ11A-105S221NU | 220±30% | 400 | 180 | 270 | | | | |
| 29 | WMZ11A-105S331NU | 330±30% | 500 | | | | | | |
| 30 | WMZ11A-105S471NU | 470±30% | 500 | | | | | | |
| 31 | WMZ11A-105S681NU | 680±30% | 600 | | | | | | |
| 32 | WMZ11A-105S102NU | 1000±30% | 600 | | | | | | |
| 33 | WMZ11A-105S152NU | 1500±30% | 600 | 140 | 210 | | | | |
| 34 | WMZ11A-105S222NU | 2200±30% | 600 | 90 | 135 | | | | |
| 35 | WMZ11A-120S68RNU | 68±30% | 360 | | | | | | |
| 36 | WMZ11A-120S101NU | 100±30% | 400 | | | | | | |
| 37 | WMZ11A-120S151NU | 150±30% | 400 | | | | | | |
| 38 | WMZ11A-120S221NU | 220±30% | 400 | 180 | 270 | | | | |
| 39 | WMZ11A-120S331NU | 330±30% | 500 | | | | | | |
| 40 | WMZ11A-120S471NU | 470±30% | 500 | | | | | | |
| 41 | WMZ11A-120S681NU | 680±30% | 600 | | | | | | |
| 42 | WMZ11A-120S102NU | 1000±30% | 600 | | | | | | |

| 序號 | 型號 | 額定零功率 電阻 值 (Ω) | 耐 電 壓 (VAC) | 最大可重複通斷電 流 (mA) | 耐 流 能 力 (mA) | 開 關 溫 度 (°C) | 外形尺寸 (mm) | | |
|----|------------------|-------------------|-------------------|--------------------|-----------------|-----------------|-----------|------|-----|
| | | | | | | | Dmax | Tmax | d |
| 43 | WMZ11A-85L68RNU | 68±30% | 360 | 300 | 450 | 85±7 | 5.5 | 4.5 | 0.6 |
| 44 | WMZ11A-85L101NU | 100±30% | 400 | | | | | | |
| 45 | WMZ11A-85L151NU | 150±30% | 400 | | | | | | |
| 46 | WMZ11A-85L221NU | 220±30% | 400 | | | | | | |
| 47 | WMZ11A-85L331NU | 330±30% | 500 | | | | | | |
| 48 | WMZ11A-85L471NU | 470±30% | 600 | | | | | | |
| 49 | WMZ11A-85L681NU | 680±30% | 600 | | | | | | |
| 50 | WMZ11A-85L102NU | 1000±30% | 600 | | | | | | |
| 51 | WMZ11A-85L152NU | 1500±30% | 600 | 140 | 210 | | | | |
| 52 | WMZ11A-85L222NU | 2200±30% | 600 | 90 | 135 | | | | |
| 53 | WMZ11A-105L68RNU | 68±30% | 360 | 300 | 450 | 105±7 | 5.5 | 4.5 | 0.6 |
| 54 | WMZ11A-105L101NU | 100±30% | 400 | | | | | | |
| 55 | WMZ11A-105L151NU | 150±30% | 400 | | | | | | |
| 56 | WMZ11A-105L221NU | 220±30% | 400 | | | | | | |
| 57 | WMZ11A-105L331NU | 330±30% | 500 | | | | | | |
| 58 | WMZ11A-105L471NU | 470±30% | 600 | | | | | | |
| 59 | WMZ11A-105L681NU | 680±30% | 600 | | | | | | |
| 60 | WMZ11A-120L101NU | 100±30% | 400 | 300 | 450 | 120±7 | 5.5 | 4.5 | 0.6 |
| 61 | WMZ11A-120L151NU | 150±30% | 400 | | | | | | |
| 62 | WMZ11A-120L221NU | 220±30% | 400 | | | | | | |
| 63 | WMZ11A-120L331NU | 330±30% | 500 | | | | | | |
| 64 | WMZ11A-120L471NU | 470±30% | 600 | | | | | | |
| 65 | WMZ11A-120L681NU | 680±30% | 600 | | | | | | |
| 66 | WMZ11A-50A68RNU | 68±30% | 420 | 400 | 600 | 50±7 | 6.5 | 5.0 | 0.6 |
| 67 | WMZ11A-50A101NU | 100±30% | 420 | | | | | | |
| 68 | WMZ11A-50A151NU | 150±30% | 500 | | | | | | |
| 69 | WMZ11A-50A221NU | 220±30% | 500 | | | | | | |
| 70 | WMZ11A-50A331NU | 330±30% | 600 | | | | | | |
| 71 | WMZ11A-50A471NU | 470±30% | 600 | | | | | | |
| 72 | WMZ11A-50A681NU | 680±30% | 600 | | | | | | |
| 73 | WMZ11A-50A102NU | 1000±30% | 600 | 200 | 300 | | | | |
| 74 | WMZ11A-50A152NU | 1500±30% | 600 | 140 | 210 | | | | |
| 75 | WMZ11A-50A222NU | 2200±30% | 600 | 90 | 135 | | | | |
| 76 | WMZ11A-50A332NU | 3300±30% | 600 | 60 | 90 | | | | |
| 77 | WMZ11A-50HV68RNU | 68±30% | 600 | 400 | 600 | 50±7 | 6.5 | 5.5 | 0.6 |
| 78 | WMZ11A-50HV101NU | 100±30% | 600 | | | | | | |
| 79 | WMZ11A-50HV151NU | 150±30% | 750 | | | | | | |
| 80 | WMZ11A-50HV221NU | 220±30% | 750 | | | | | | |
| 81 | WMZ11A-50HV331NU | 330±30% | 800 | | | | | | |

| 82 | WMZ11A-50HV471NU | 470±30% | 900 | | | | | | |
|-----|------------------|-------------------|-------------------|--------------------|-----------------|-----------------|-----------|------|-----|
| 83 | WMZ11A-50HV681NU | 680±30% | 900 | 300 | 450 | | | | |
| 84 | WMZ11A-50HV102NU | 1000±30% | 900 | 200 | 300 | | | | |
| 85 | WMZ11A-50HV152NU | 1500±30% | 900 | 120 | 210 | | | | |
| 序號 | 型號 | 額定零功率 電阻 值 (Ω) | 耐 電 壓 (VAC) | 最大可重複通斷電 流 (mA) | 耐 流 能 力 (mA) | 開 關 溫 度 (°C) | 外形尺寸 (mm) | | |
| | | | | | | | Dmax | Tmax | d |
| 86 | WMZ11A-75A68RNU | 68±30% | 420 | 400 | 600 | 75±7 | 6.5 | 5.0 | 0.6 |
| 87 | WMZ11A-75A101NU | 100±30% | 420 | | | | | | |
| 88 | WMZ11A-75A151NU | 150±30% | 500 | | | | | | |
| 89 | WMZ11A-75A221NU | 220±30% | 500 | | | | | | |
| 90 | WMZ11A-75A331NU | 330±30% | 600 | | | | | | |
| 91 | WMZ11A-75A471NU | 470±30% | 600 | | | | | | |
| 92 | WMZ11A-75A681NU | 680±30% | 700 | 300 | 450 | | | | |
| 93 | WMZ11A-75A102NU | 1000±30% | 700 | 200 | 300 | | | | |
| 94 | WMZ11A-75A152NU | 1500±30% | 800 | 140 | 210 | | | | |
| 95 | WMZ11A-75A222NU | 2200±30% | 800 | 90 | 135 | | | | |
| 96 | WMZ11A-75A332NU | 3300±30% | 800 | 60 | 90 | | | | |
| 97 | WMZ11A-75HV68RNU | 68±30% | 600 | 400 | 600 | 75±7 | 6.5 | 5.5 | 0.6 |
| 98 | WMZ11A-75HV101NU | 100±30% | 600 | | | | | | |
| 99 | WMZ11A-75HV151NU | 150±30% | 750 | | | | | | |
| 100 | WMZ11A-75HV221NU | 220±30% | 750 | | | | | | |
| 101 | WMZ11A-75HV331NU | 330±30% | 800 | | | | | | |
| 102 | WMZ11A-75HV471NU | 470±30% | 900 | | | | | | |
| 103 | WMZ11A-75HV681NU | 680±30% | 900 | 300 | 450 | | | | |
| 104 | WMZ11A-75HV102NU | 1000±30% | 900 | 200 | 300 | | | | |
| 105 | WMZ11A-75HV152NU | 1500±30% | 1000 | 140 | 210 | | | | |
| 106 | WMZ11A-75HV222NU | 2200±30% | 1000 | 90 | 145 | | | | |
| 107 | WMZ11A-75HV332NU | 3300±30% | 1000 | 60 | 90 | | | | |
| 108 | WMZ11A-105A68RNU | 68±30% | 400 | 400 | 600 | 105±7 | 6.5 | 5.0 | 0.6 |
| 109 | WMZ11A-105A101NU | 100±30% | 400 | | | | | | |
| 110 | WMZ11A-105A151NU | 150±30% | 400 | | | | | | |
| 111 | WMZ11A-105A221NU | 220±30% | 500 | | | | | | |
| 112 | WMZ11A-105A331NU | 330±30% | 600 | | | | | | |
| 113 | WMZ11A-105A471NU | 470±30% | 600 | | | | | | |
| 114 | WMZ11A-105A681NU | 680±30% | 700 | 300 | 450 | | | | |
| 115 | WMZ11A-105A102NU | 1000±30% | 700 | 200 | 300 | | | | |
| 116 | WMZ11A-120A68RNU | 68±30% | 400 | 400 | 600 | 120±7 | 6.5 | 5.0 | 0.6 |
| 117 | WMZ11A-120A101NU | 100±30% | 400 | | | | | | |
| 118 | WMZ11A-120A151NU | 150±30% | 400 | | | | | | |
| 119 | WMZ11A-120A221NU | 220±30% | 500 | | | | | | |
| 120 | WMZ11A-120A331NU | 330±30% | 500 | | | | | | |

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|-----|-------------------|----------|------|-----|------|-------|-----|-----|-----|
| 121 | WMZ11A-120A471NU | 470±30% | 600 | | | | | | |
| 122 | WMZ11A-50B68RNU | 68±30% | 400 | | | | | | |
| 123 | WMZ11A-50B101NU | 100±30% | 500 | 800 | 1200 | 50±7 | 8.5 | 5.0 | 0.6 |
| 124 | WMZ11A-50B151NU | 150±30% | 500 | | | | | | |
| 125 | WMZ11A-50B221NU | 220±30% | 600 | | | | | | |
| 126 | WMZ11A-50B331NU | 330±30% | 600 | | | | | | |
| 127 | WMZ11A-50B471NU | 470±30% | 600 | 430 | 645 | | | | |
| 128 | WMZ11A-50B681NU | 680±30% | 600 | 300 | 450 | | | | |
| 129 | WMZ11A-50B102NU | 1000±30% | 600 | 200 | 300 | | | | |
| 130 | WMZ11A-75B68RNU | 68±30% | 400 | | | | | | |
| 131 | WMZ11A-75B101NU | 100±30% | 500 | 800 | 1200 | 75±7 | 8.5 | 5.0 | 0.6 |
| 132 | WMZ11A-75B151NU | 150±30% | 500 | | | | | | |
| 133 | WMZ11A-75B221NU | 220±30% | 600 | | | | | | |
| 134 | WMZ11A-75B331NU | 330±30% | 600 | | | | | | |
| 135 | WMZ11A-75B471NU | 470±30% | 600 | 430 | 645 | | | | |
| 136 | WMZ11A-85B68RNU | 68±30% | 400 | | | | | | |
| 137 | WMZ11A-85B101NU | 100±30% | 500 | 800 | 1200 | 85±7 | 8.5 | 5.0 | 0.6 |
| 138 | WMZ11A-85B151NU | 150±30% | 500 | | | | | | |
| 139 | WMZ11A-85B221NU | 220±30% | 600 | | | | | | |
| 140 | WMZ11A-85B331NU | 330±30% | 600 | | | | | | |
| 141 | WMZ11A-85B471NU | 470±30% | 600 | 430 | 645 | | | | |
| 142 | WMZ11A-105B68RNU | 68±30% | 400 | | | | | | |
| 143 | WMZ11A-105B101NU | 100±30% | 500 | 800 | 1200 | 105±7 | 8.5 | 5.0 | 0.6 |
| 144 | WMZ11A-105B151NU | 150±30% | 500 | | | | | | |
| 145 | WMZ11A-105B221NU | 220±30% | 600 | | | | | | |
| 146 | WMZ11A-105B331NU | 330±30% | 600 | | | | | | |
| 147 | WMZ11A-105B471NU | 470±30% | 600 | 430 | 645 | | | | |
| 148 | WMZ11A-75BHV68RNU | 68±30% | 600 | | | | | | |
| 149 | WMZ11A-75BHV101NU | 100±30% | 600 | 800 | 1200 | 75±7 | 8.5 | 5.5 | 0.6 |
| 150 | WMZ11A-75BHV151NU | 150±30% | 750 | | | | | | |
| 151 | WMZ11A-75BHV221NU | 220±30% | 900 | | | | | | |
| 152 | WMZ11A-75BHV331NU | 330±30% | 1000 | | | | | | |
| 153 | WMZ11A-75BHV471NU | 470±30% | 1000 | 430 | 645 | | | | |
| 154 | WMZ11A-75BHV681NU | 680±30% | 1000 | 300 | 450 | | | | |
| 155 | WMZ11A-75BHV102NU | 1000±30% | 1000 | 200 | 300 | | | | |
| 156 | WMZ11A-75BHV152NU | 1500±30% | 1000 | 240 | 210 | | | | |
| 157 | WMZ11A-75BHV222NU | 2200±30% | 1000 | 90 | 145 | | | | |