

磁簧管產品規格 REED SWITCH SPECIFICATION

型名 Type No. BSW-11SM

概要：Feature

BSW-11SM 是小型單接點磁簧管，主要專用於表面粘著使用
The BSW-11SM is a small single-contact reed switch designed for surface mount technologe system use.

用途：Application

| | |
|------------|--|
| ■汽車電子裝置 | Automotive electronic devices |
| ■轉速裝置 | Rotation and speed Monitoring |
| ■安全系統之門窗開關 | Door and Window Contacts for Security System |
| ■通訊設備 | Communication equipment |
| ■量測儀器 | Measurement equipment |

電氣特性：Electrical Characteristics

| | | |
|------|--------------------------------------|------------------------|
| 接點形式 | Contact Form | SPST Form A Centre gap |
| 接點材質 | Contact Material | Ruthenium |
| 開閉功率 | Switching Power (Max.) | 10 W |
| 開閉電流 | Switching Current (Max.) | 0.5 Amp. |
| 通電電流 | Carry Current (Max.) | 1.2 Amp. |
| 開閉電壓 | Switching Voltage (Max.) | 200 VDC |
| 接點耐壓 | Breakdown Voltage (Min.) | 250 VDC |
| 接觸阻抗 | Contact Resistance (Max.) | 100 Milliohms |
| 絕緣阻抗 | Insulation Resistance (Min.) | 10 ¹² Ohms |
| 接點電容 | Contact Capacitance (Max.) | 0.3 pF |
| 動作時間 | Operate Time Including Bounce (Typ.) | 0.6 Milliseconds |
| 復歸時間 | Release Time (Typ.) | 0.2 Milliseconds |
| 感動值 | Pull in Range | 8 – 30 AT |
| 開放值 | Drop out Range | 35 – 90% |

Notes: (1) 在開閉功率(VA)項目中, 高 AT 值產品會超過額定值(10VA), 低 AT 值者會低於額定值。
因此特定負載之壽命試驗必需再確認。

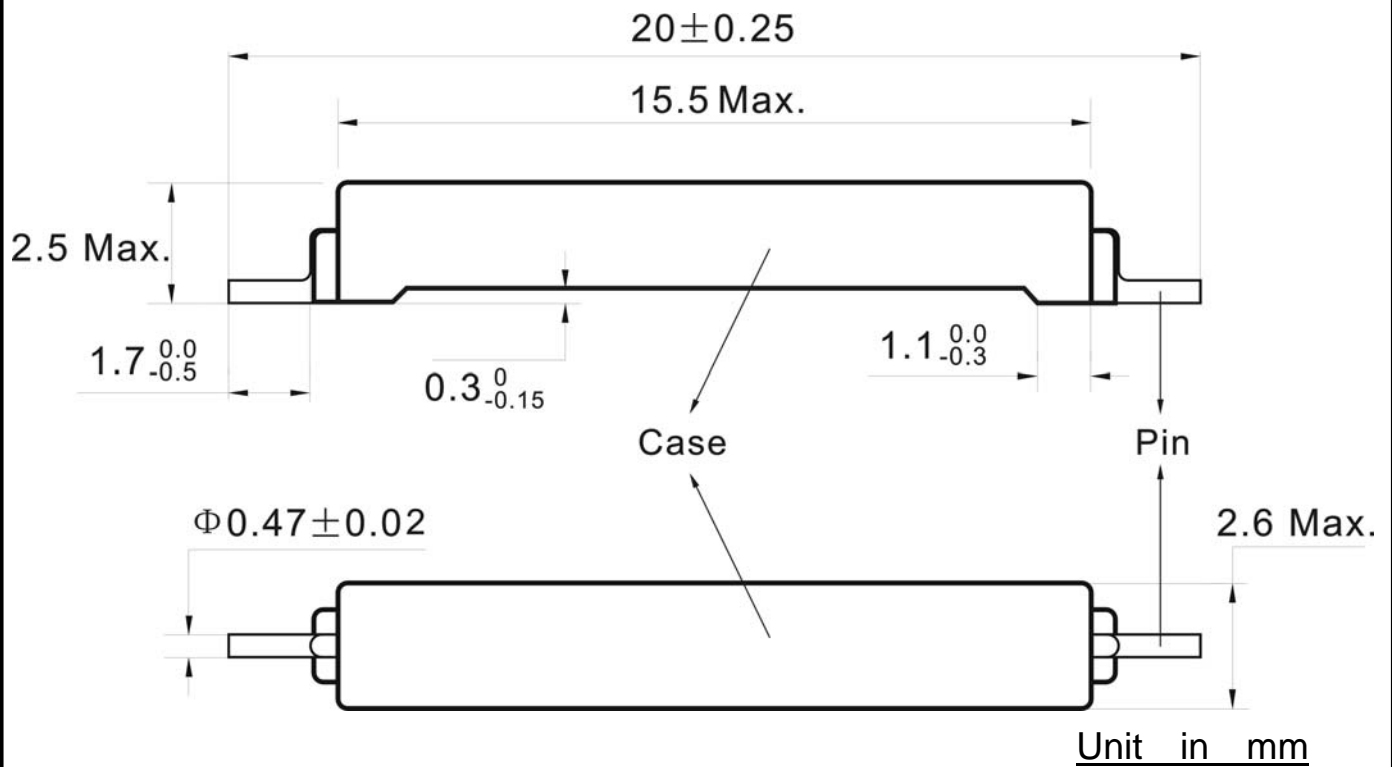
The specification for VA Rating may be exceeded for less sensitive(high AT) switches, and should be decreased for very Sensitive(low AT)Switches. Specific life testing for a particular load will be run upon request.

(2) 表面粘著零件迴焊製程溫度達 250 °C (482 °F) 時不超過 1 分鐘。

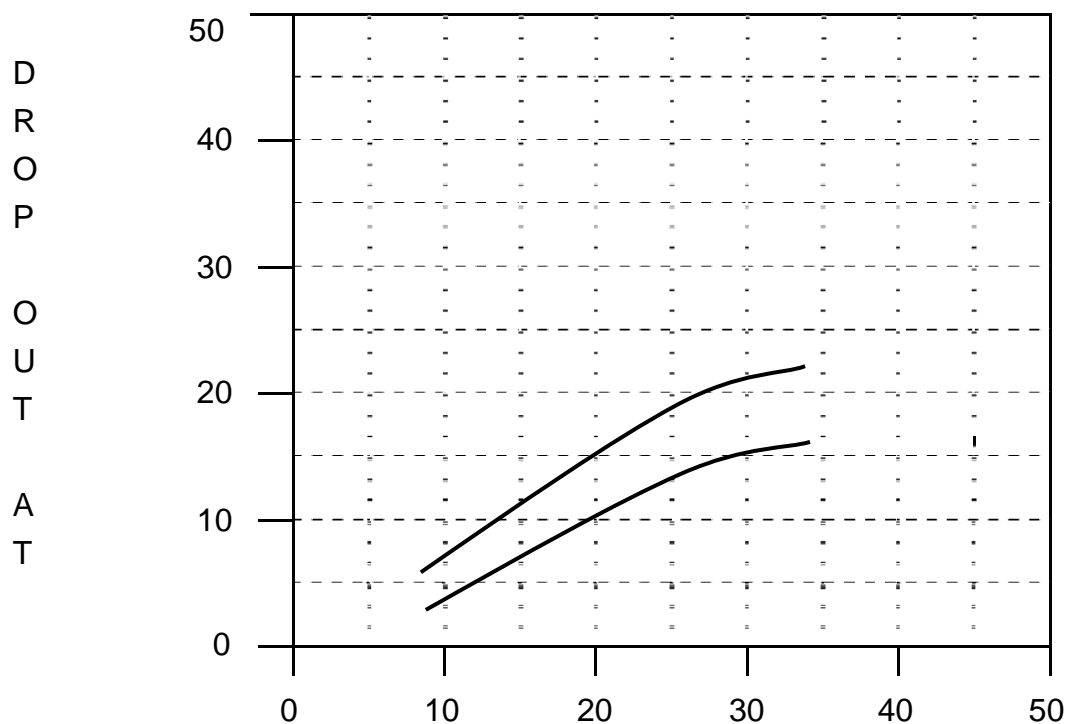
Surface mount component processing temperature 250 °C (482 °F) Max. for 1 minute.

BSW - 11SM REED SWITCH

外型圖 : Outer Dimension



感動值與開放值之分布 : DROP OUT Vs PULL IN



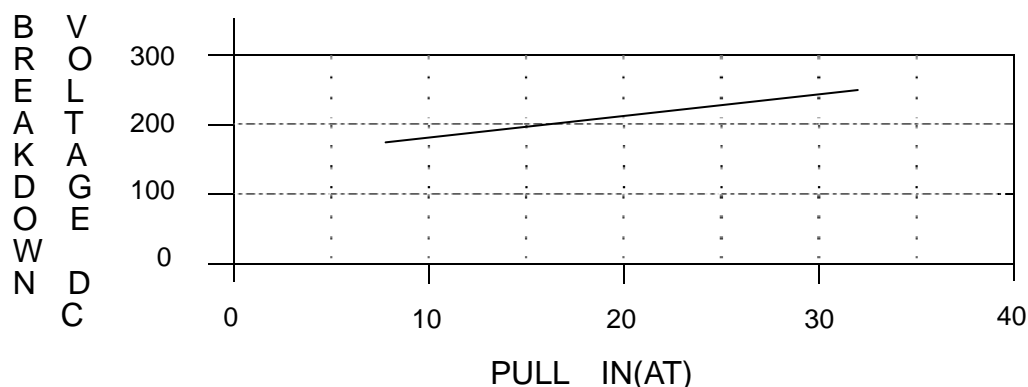
PULL IN AT

BSW 11SM REED SWITCH

物理特性 : Physical Characteristics

| | | |
|--------|--|------------------|
| 使用溫度範圍 | Operating Temperature | -40°C to + 125°C |
| 保存溫度範圍 | Storage Temperature | -50°C to + 155°C |
| 耐振動性 | Vibration 10 – 2000 Hz (G 'S MAX) | 30G |
| 耐衝擊性 | Shock Resistance 11ms.½ Sine wave (G 'S MAX) | 100G |
| 諧振頻率 | Frequency (TYP.) | 5 KHZ |
| 開閉頻率 | (MAX.) | 200 HZ |

接點耐壓與感動值之關係: Breakdown Voltage Vs PULL IN(AT)



各項負載之壽命試驗: MINIMUM LIFE EXPECTANCY

| 負載 Load | 5VDC 2mA | 10VDC 1A | 12VDC 10mA | 24VDC 10mA | 48VDC 100mA | 70VDC 80mA |
|------------|---------------------|---------------------|--------------------|-------------------|---------------------|---------------------|
| 壽命 Life | 100×10 ⁶ | 0.5×10 ⁶ | 10×10 ⁶ | 2×10 ⁶ | 0.5×10 ⁶ | 0.5×10 ⁶ |

壽命之定義: END OF LIFE DEFINITION

- 1.接觸阻抗大於 1 歐姆 Contact Resistance above 1 ohm
- 2.接點無法開通 Failure to open (sticking)