Subminiature Power Relay ETS

- Slim size (width 5mm)
- High breakdown voltage 4kV (between coil and contacts)
- Surge voltage up to 6kV (between coil and contacts)
- Clearance/creepage distance: 8mm
- High sensitive: 170mW
- 1 Form A and 1 Form C configurations

Options and ordering codes

ETS - 1A N - S - L - 12VDC

Contact Form
- Contact Material
  - AgNi
  - AgNi + Au Plate

Coil Voltage
- Sealing
  - Sealed

Contact Data

- Contact arrangement: 1A, 1C
- Initial contact resistance Max.: 100mΩ (at 1A 6VDC)
- Contact material: AgNi
- Contact Rating (Res. load): 6A 2500VAC / 30VDC
- Max. switching voltage: 400VAC / 125VDC
- Max. switching current: 6A
- Max. switching power: 1500VA / 180W
- Mechanical Life: 1x10^7 (at 20°C)
- Electrical Life: NO / NC: 1x10^4 (at 85°C)

Characteristics

- Initial Insulation Resistance: 1000MΩ @ 500VDC
- Dielectric Strength
  - Between coil & contact: 400VAC 1min.
  - Between open contacts: 1000VDC 1min.
- Operate time (at nomi. Volt): Max. 8ms
- Release time (at nomi. Volt): Max. 4ms
- Shock Resistance
  - Functional: 50m/s²
  - Destructive: 1000m/s²
- Vibration Resistance: 10 to 55Hz 1mm DA
- Humidity: 5 to 85% RH
- Ambient Temp: -40°C to +85°C
- Termination: PCB
- Unit Weight: 5.4g
- Construction: Sealed IP67, Flux proof

Coil

- Coil power: 5 to 24VDC: 170mW
  - 48VDC, 60VDC: 210mW

Coil Data

<table>
<thead>
<tr>
<th>Coil Voltage VDC</th>
<th>Pick-up Voltage VDC</th>
<th>Drop-out Voltage VDC</th>
<th>Max. allowable voltage (VDC 85°C)</th>
<th>Coil Resistance (± 10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>3.75</td>
<td>0.25</td>
<td>7.5</td>
<td>147±10%</td>
</tr>
<tr>
<td>6</td>
<td>4.50</td>
<td>0.30</td>
<td>9.0</td>
<td>212±10%</td>
</tr>
<tr>
<td>9</td>
<td>6.75</td>
<td>0.45</td>
<td>13.5</td>
<td>476±10%</td>
</tr>
<tr>
<td>12</td>
<td>9.00</td>
<td>0.60</td>
<td>18</td>
<td>848±10%</td>
</tr>
<tr>
<td>18</td>
<td>13.5</td>
<td>0.90</td>
<td>27</td>
<td>1906±15%</td>
</tr>
<tr>
<td>24</td>
<td>18.0</td>
<td>1.20</td>
<td>36</td>
<td>3390±15%</td>
</tr>
<tr>
<td>48</td>
<td>36.0</td>
<td>2.40</td>
<td>72</td>
<td>10600±15%</td>
</tr>
<tr>
<td>60</td>
<td>45.0</td>
<td>3.00</td>
<td>90</td>
<td>16600±15%</td>
</tr>
</tbody>
</table>

Notes: 1) When require pick-up voltage = 70% nominal voltage, special order allowed
2) When install 1 Form C type of ETS, please do not make the relay side with 5mm width down

Safety Approval Ratings

UL & CUR: 6A 30VDC
Resistive: 6A 277VAC
Pilot duty: R300

www.imopc.com
Outline dimensions (mm)
Wiring diagram and PC Board layout

Characteristic Curve

MAX, SWITCHING POWER

LIFE CURVE

COIL TEMPERATURE RISE