



ISPA60

DESCRIPTION

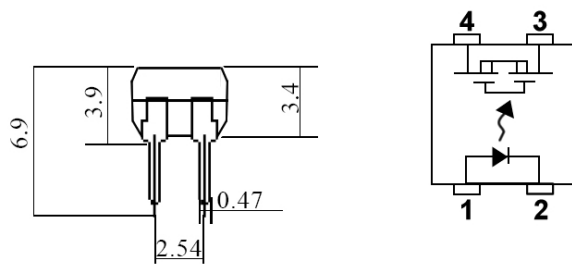
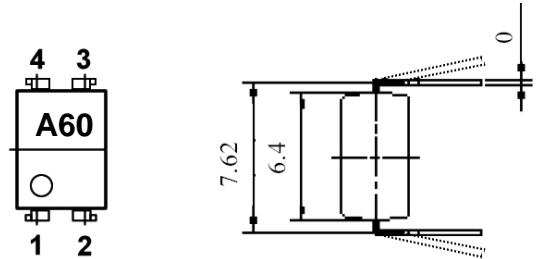
The ISPA60 is a 1-Form A solid state relay in a space saving 4 pin DIL package. The ISPA60 utilises MOSFET technology that is optically coupled to a highly efficient GaAlAs infrared light emitting diode.

FEATURES

- Options :-
 - 10mm lead spread - add G after part no.
 - Surface mount - add SM after part no.
 - Tape&reel - add SMT&R after part no.
- High Load Voltage(600V)
- High Isolation Voltage (3.75kVRMS)
- No moving parts
- High reliability
- Arc-Free without snubber circuits
- All electrical parameters 100% tested
- Custom electrical selections available

APPLICATIONS

- Telecommunications
- Industrial systems controllers
- Measuring instruments
- Signal transmission between systems of different potentials and impedances



ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise specified)

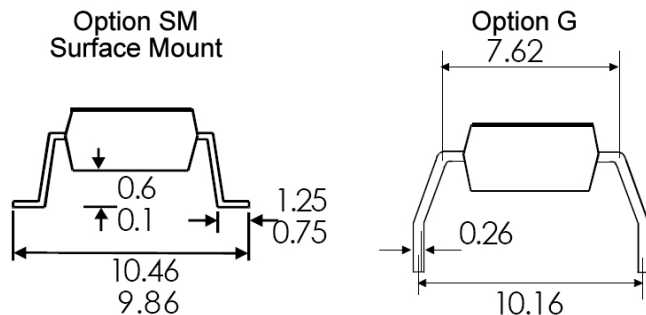
| | |
|---|------------------|
| Storage Temperature | -40°C to + 100°C |
| Operating Temperature | -40°C to + 85°C |
| Lead Soldering Temperature (1/16 inch (1.6mm) from case for 10 secs) | 260°C |

INPUT DIODE

| | |
|-----------------|------|
| Forward Current | 50mA |
| Reverse Voltage | 5V |

OUTPUT MOSFET

| | |
|--------------------------------|-------|
| Load Voltage (AC peak or DC) | 600V |
| Continuous Load Current | 70mA |
| Peak Current (10mS) | 120mA |



ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

| PARAMETER | | MIN | TYP | MAX | UNITS | TEST CONDITION |
|-----------|--|------|------|-----|---------------|--|
| Input | Forward Voltage (V_F) | 1.0 | | 1.4 | V | $I_F = 10\text{mA}$ |
| | Reverse Current (I_R) | | | 10 | μA | $V_R = 5\text{V}$ |
| Output | On state Resistance (R_{on}) | | 20 | 30 | Ohm | $I_F = 10\text{mA}, I_L = 70\text{mA}$ |
| | Off state Leakage Current (I_{LK}) | | | 1 | μA | $I_F = 0\text{mA}, I_V = 600\text{V}$ |
| | Turn-On Time (T_{on}) | | 0.2 | 0.5 | mS | $I_F = 10\text{mA}, I_L = 70\text{mA}$ |
| | Turn-Off Time (T_{off}) | | 0.03 | 0.3 | mS | $I_F = 10\text{mA}, I_L = 70\text{mA}$ |
| | Ouput Capacitance | | 150 | | pF | $f = 1\text{MHz}$ |
| Coupled | Capacitance | | 1.0 | | pF | $f = 1\text{MHz}$ |
| | Isolation Voltage | 3750 | | | Vms | 1 minute (Note 1) |
| | Isolation Resistance | 5 | | | Gohm | DC= 500V (Note 1) |

Note 1 Measured with input leads shorted together and output leads shorted together.

Note 2 Special Selections are available on request. Please consult the factory.