



ISDB40

DESCRIPTION

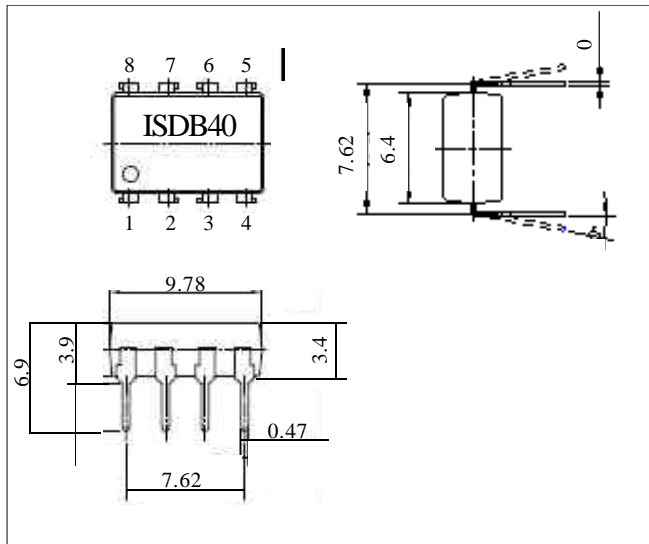
The ISDB40 is a 2-Form B solid state relay in an 8 pin DIL package. The ISDB40 utilises MOSFET technology that is optically coupled to a highly efficient GaAlAs infrared light emitting diode.

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 (400V)
- High Isolation Voltage (3.75kV_{RMS})
- 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)

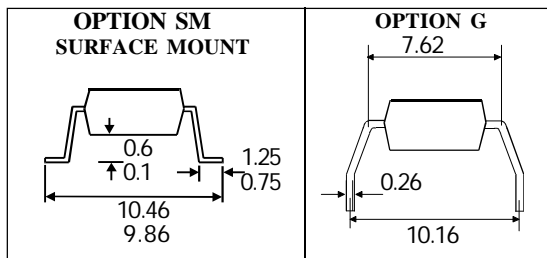
Storage Temperature _____ -40°C to + 100°C
Operating Temperature _____ -40°C to + 85°C
Lead Soldering Temperature
(1/16 inch (1.6mm) from case for 10 secs) 260°C

INPUT DIODE

Forward Current _____ 50mA
Reverse Voltage _____ 5V

OUTPUT MOSFET

Load Voltage (AC peak or DC) _____ 400V
Continuous Load Current _____ 100mA
Peak Current (10mS) _____ 250mA



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ELECTRICAL CHARACTERISTICS (T_A=25°C Unless otherwise noted)

| PARAMETER | | MIN | TYP | MAX | UNITS | TEST CONDITION |
|-----------|---|------|------|------|-------|---|
| Input | Forward Voltage (V _F) | 1.0 | | 1.4 | V | I _F =10mA |
| | Reverse Current (I _R) | | | 10 | μA | V _R =5V |
| Output | On state Resistance (Ron) | | ?? | 50.0 | Ohm | I _F = 10mA, I _L = 100mA |
| | Off state Leakage Current (I _{LK}) | | | 1 | uA | I _F = 0mA, I _V = 400V |
| | Turn-On Time (Ton) | | 0.03 | 0.5 | mS | I _F = 10mA, I _L = 100mA |
| | Turn-Off Time (Toff) | | 0.4 | 1.0 | mS | I _F = 10mA, I _L = 100mA |
| | Ouput Capacitance | | 150 | | pF | f = 1MHz |
| Coupled | Capacitance | | 1.0 | | pF | f = 1MHz |
| | Isolation Voltage | 3750 | | | Vrms | 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.