



ISDB20

DESCRIPTION

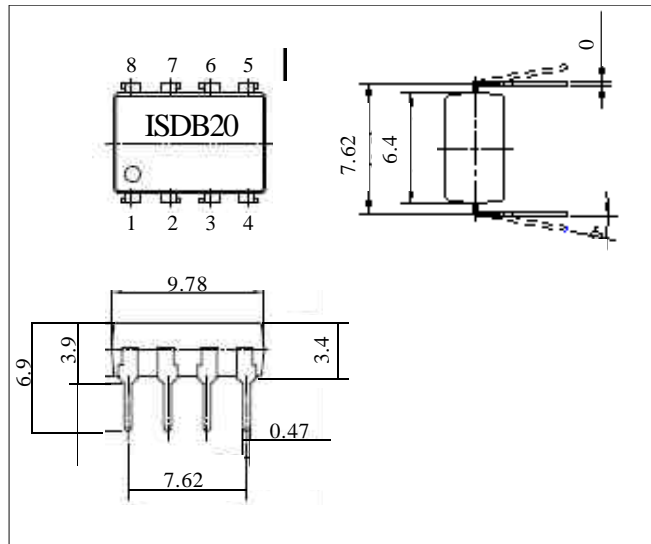
The ISDB20 is a 2-Form B solid state relay in an 8 pin DIL package. The ISDB20 utilises MOSFET technology that is optically coupled to a highly efficient GaAlAs infrared light emitting diode.

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 (200V)
- 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)

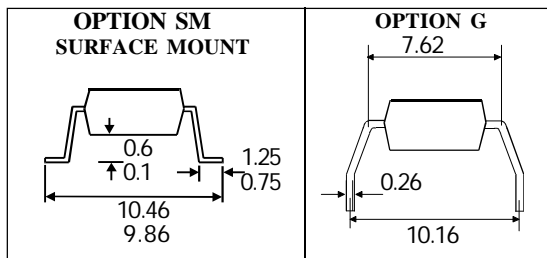
Storage Temperature _____ -40°C to + 100°C
Operating Temperature _____ -40°C to + 85°C
Lead Soldering Temperature
(1/16 inch (1.6mm) from case for 10 secs) 260°C

INPUT DIODE

Forward Current _____ 50mA
Reverse Voltage _____ 5V

OUTPUT MOSFET

Load Voltage (AC peak or DC) _____ 200V
Continuous Load Current _____ 100mA
Peak Current (10mS) _____ 250mA



ISOCOM COMPONENTS LTD

Unit 25B, Park View Road West,
Park View Industrial Estate, Brenda Road
Hartlepool, TS25 1YD England Tel: (01429)863609
Fax : (01429) 863581 e-mail sales@isocom.co.uk
<http://www.isocom.com>

ISOCOM COMPONENTS ASIA LTD

Hong Kong Office, 1712-1713
Laurels Industrial Centre, 32 Tai Yau Street,
San Po Kong, Kowloon, Hong Kong.
Tel: +852 2995 9217 Fax : +852 8161 6292
e-mail sales@isocom.com.hk

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})		17	30.0	Ohm	$I_F = 10\text{mA}, I_L = 100\text{mA}$
	Off state Leakage Current (I_{LK})			1	μA	$I_F = 0\text{mA}, I_V = 200\text{V}$
	Turn-On Time (T_{on})		0.03	0.5	mS	$I_F = 10\text{mA}, I_L = 100\text{mA}$
	Turn-Off Time (T_{off})		0.4	1.0	mS	$I_F = 10\text{mA}, I_L = 100\text{mA}$
	Ouput Capacitance		100		pF	$f = 1\text{MHz}$
Coupled	Capacitance		1.0		pF	$f = 1\text{MHz}$
	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.