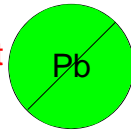


This component is RoHS compliant



OPI 2000M High Speed Opto Isolator Surface Mount ATEX and IECEx certified

The OPI 2000M High Speed Optically Coupled Isolator consists of a High Speed Infrared emitter coupled to a silicon photo I.C. The unit is designed for applications requiring high voltage isolation between input & output.

- Surface Mount in Tape & Reel
- 10KV isolation

High Speed 2Mb/sec.
Low Propagation Delay



CERTIFICATE ATEX BAS01ATEX1285U/3

Confirmed conform to:-

- EN60079-0:2006 EN61241-0:2006
- EN60079-11:2007 EN61241-11:2006
- EN60079-26:2004

Conditions of use apply:- See 'Schedule of limitations' on certificate



CERTIFICATE IECEx BAS 06.0021U/1

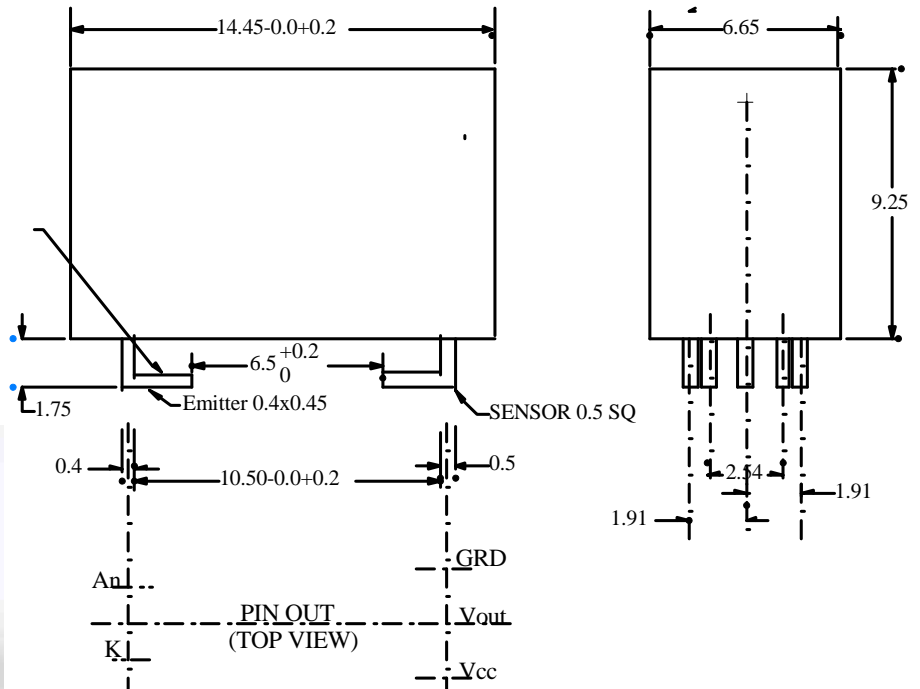
Designed and manufactured to:-

- IEC 60079-0: 2000 Edition 3.1
- IEC 60079-11 :1999 Edition 4
- IEC 60097-26 :2004 Edition 1

Conditions of use apply:- See 'Schedule of limitations' on certificate.

MECHANICAL DATA

SURFACE MOUNT LEAD FORM
CONDITIONS OF USE APPLY



BEDFORD OPTO TECHNOLOGY LTD
1, BIGGAR BUSINESS PARK, BIGGAR, LANARKSHIRE, ML12 6FX
 Tel: +44 (0) 1899 221221 Fax: +44 (0) 1899 221009
 Website: bot.co.uk E-mail: bill@bot.co.uk

ISS J 21.07.08

ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

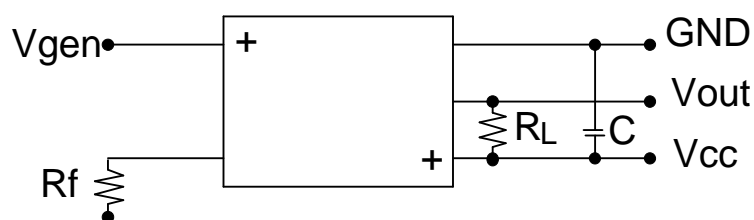
www.DataSheet4U.com

| | |
|--|--------------------------------|
| INPUT DIODE FORWARD DC CURRENT REVERSE DC VOLTAGE POWER DISSIPATION | 100mA 5 Volts 150mW (ii) |
| OUTPUT IC MAX SUPPLY VOLTAGE POWER DISSIPATION | 7 Volts 165mW |
| OPERATING TEMP | -40°C TO +80°C |
| STORAGE TEMP | -40°C TO +85°C |
| INPUT-TO-OUTPUT ISOLATION VOLTAGE | ± 10 KV DC (i) |

- i) Measured with the input leads and output leads shorted together for one min.
ii) Thermal resistance 450 K/W

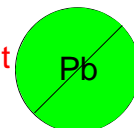
Whilst the devices are capable of operating continually at the noted elevated temperatures users should be aware of the possibility of the need to increase the diode current to trigger the device over long periods at high temperatures & currents.

CIRCUIT



$$R_L = 560 \text{ ohm} \quad C = 0.01 \mu\text{F}$$

This component is RoHS compliant

**Packing**

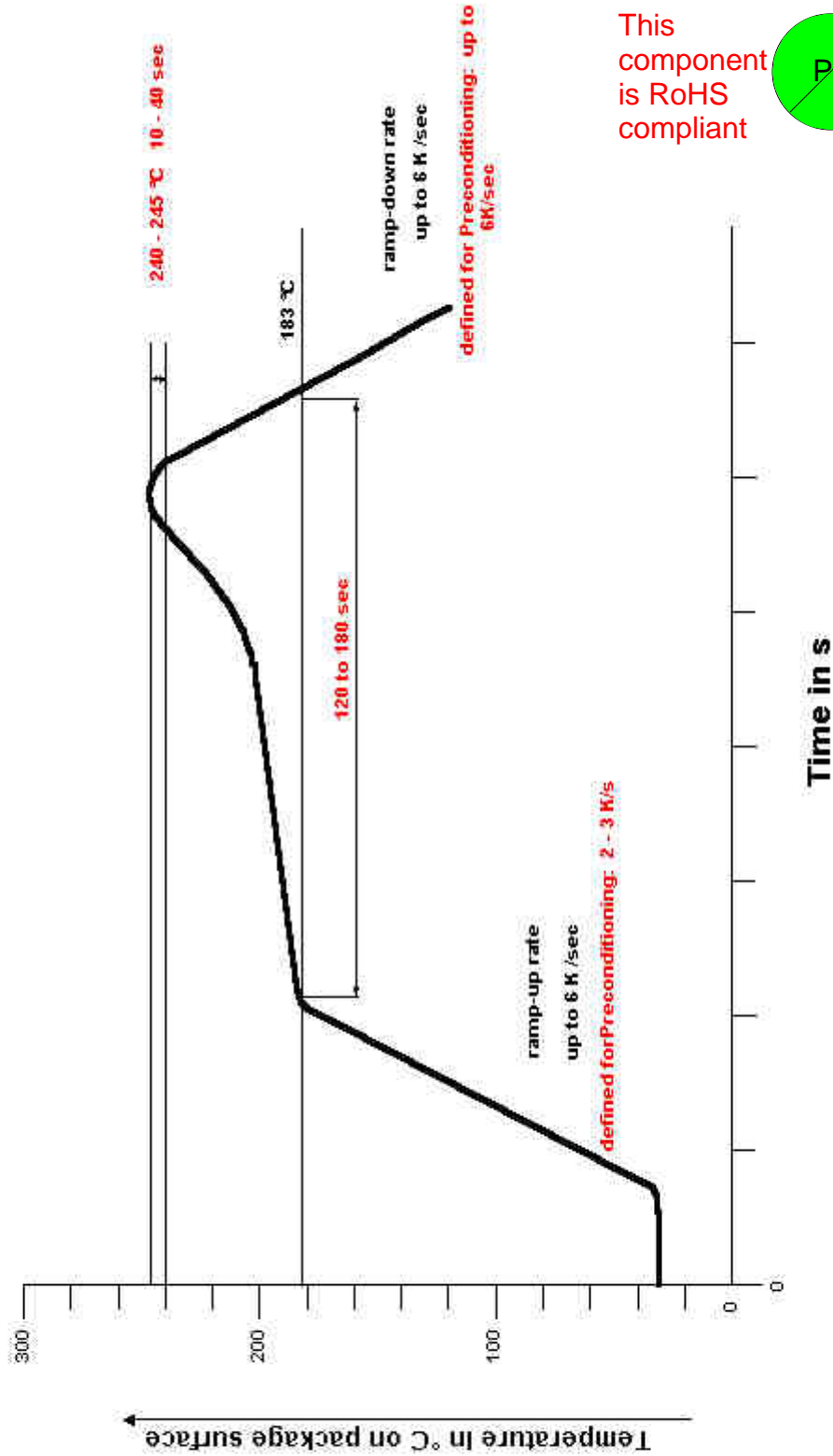
Waffle Trays - 100 per tray 290mm x 200mm.

Tape & Reel - 300 Devices per 13" Diam Reel with 7" Hub 24mm Wide tape.

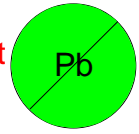
BEDFORD OPTO TECHNOLOGY LTD
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IR Reflow soldering profile conforming to IPC9501



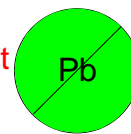
This component is RoHS compliant



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OPTO ELECTRONIC DATA (TA = 25°C)

This
component
is RoHS
compliant

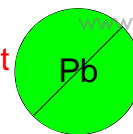


| PARAMETER | SYMBOL | MIN | TYP | MAX | UNITS | TEST CONDITIONS |
|--|------------------|------|------|-----|-------|---|
| INPUT DIODE | | | | | | |
| Forward Voltage | V _F | - | 1.35 | 1.6 | V | I _F =100mA t _p =20mS |
| Reverse Voltage | V _R | 5.0 | - | - | V | I _r = 100uA |
| OUTPUT IC (V_{cc}=4.75 to 5.25) | | | | | | |
| High level Output Current | I _{CH} | | - | 100 | uA | I _c = 10 uA |
| Low Level Output Voltage | V _{OL} | | - | 0.6 | V | I _F =10mA I _{OL} =2.6mA |
| High Level Supply Current | I _{CCH} | | | 15 | mA | I _F =0 |
| Low Level Supply Current | I _{CCL} | | | 18 | mA | I _F =7.5mA |
| COUPLED(V_{cc}=5volts) | | | | | | |
| Propagation Delay to Low Output level | t _{PLH} | | | 800 | nSecs | R _L =560ohms C=0.01uF |
| Propagation Delay to High Output Level | t _{PHL} | | | 800 | nSecs | ditto |
| Input/Output Isolation Voltage | V _{i-o} | 10kV | | | Volts | Input and output leads shorted |

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CONFORMITY STATEMENT
OPI2000M SERIES

This
component
is RoHS
compliant



www.DataSheet4U.com

Manufacturer:- BEDFORD OPTO TECHNOLOGY LTD

Address:- 1 Biggar Business Park, Market Road, Biggar,
Lanarkshire, ML12 6FX, Scotland

Directive 94/9/EC

EC-Type Examination Certificate:-

BAS01ATEX1285U – Latest supplement BAS01ATEX1285U/3 issued 30.10.07

Provisions of the Directive fulfilled by the component:-

GroupII Category 1GD

EexialIC

Notified Body for EC-Type Examination & Production:- BaseefaLtd. – No. 1180

Baseefa Ltd.

Rockhead Business Park,

Staden Lane,

Buxton,

Derbyshire SK17 9RZ,

England

Tel:- +44 (0)1298 766600

Fax:- +44 (0)1298 766601

e-mail:- info@baseefa.com

Harmonised Standards used:-

EN60079-0:2006

EN60079-11:2007

EN61241-11:2006

Other Standards used:-

EN60079-26:2004 – (confirmed by Notified Body unit complies in all respects)

EN61241-0:2006 – (State of the Art – intended for harmonisation)

On Behalf of Bedford Opto Technology Ltd., I declare that, the date the component accompanied by this statement is placed on the market, the component conforms with all technical and regulatory requirements of the ATEX Directive 94/9/EC.

Mr R.W.Stott
Managing Director