



OPI 2000Series High Speed Opto Isolator Surface Mount

BASEEFA CERTIFICATE TO BE APPLIED FOR

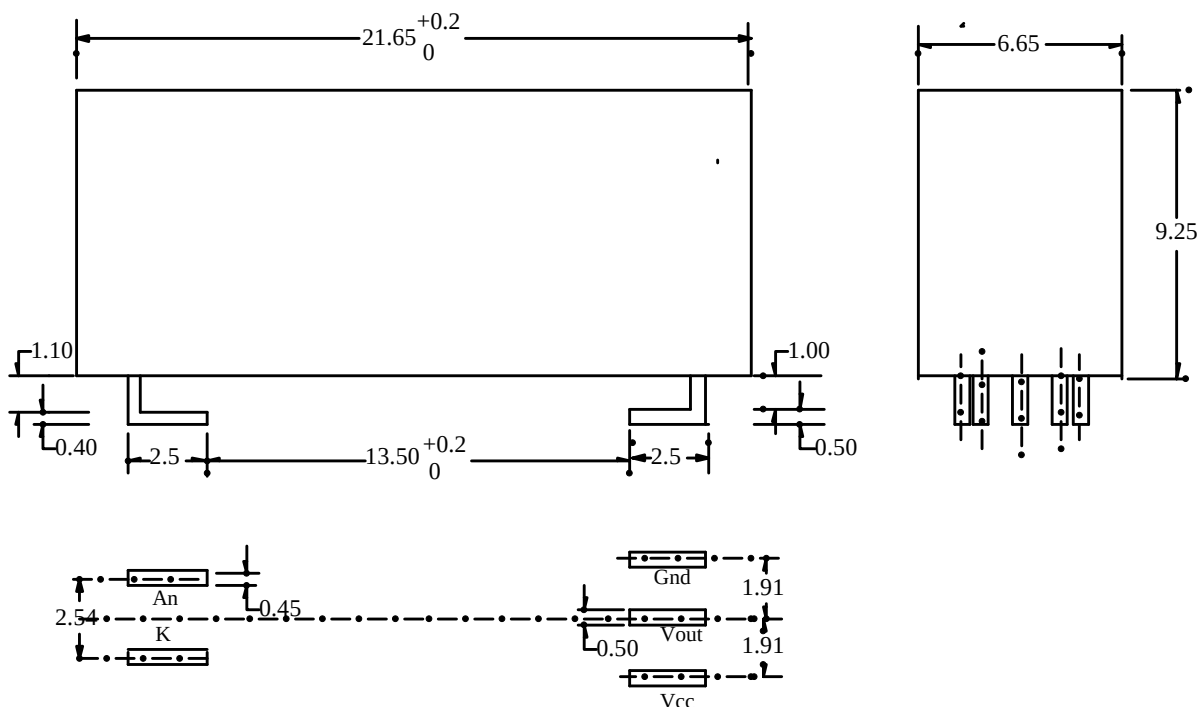
The OPI 2000 High Speed Optically Coupled Isolator consists of a High Speed Infrared emitter coupled to a silicon photo I.C. The unit is designed for applications requiring high voltage isolation between input & output meeting BASEEFA requirements.

- Surface Mount configuration in Tape & Reel
- 10KV isolation
- High Speed 2Mb/sec.
- Low Propagation Delay



OPI2000MK has a screen over the sensor connected to the earth lead to improve Common Mode Rejection.
Standard part OPI2000

MECHANICAL DATA



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

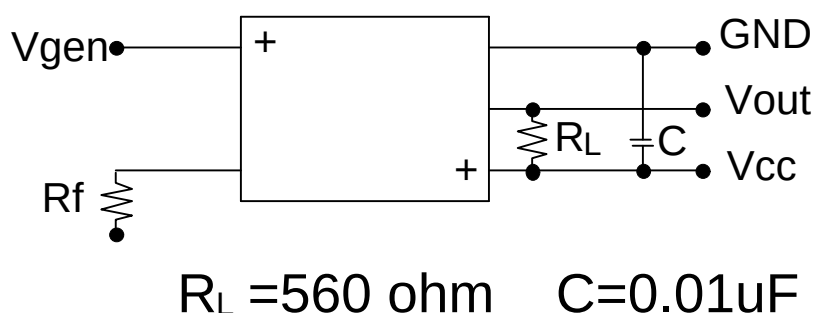
ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

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 +70°C
STORAGE TEMP	-40°C TO +85°C
INPUT-TO-OUTPUT ISOLATION VOLTAGE	±10KV 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

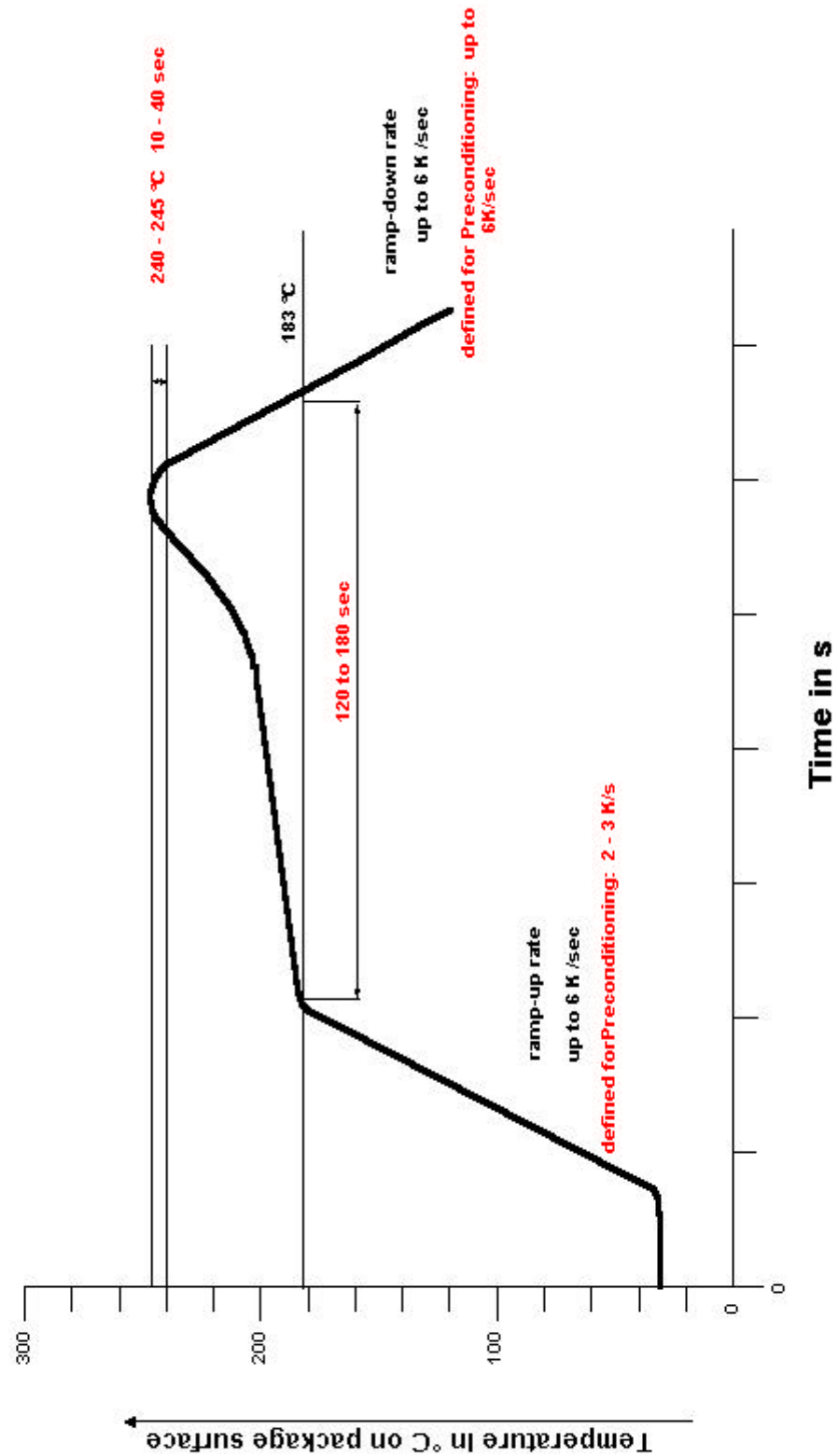
**Packing**

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

Tape & Reel - 300 Devices per 13" Diam Reel with 7" HuB 32mm Wide tape.

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IR Reflow soldering profile conforming to IPC9501



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PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
INPUT DIODE						
Forward Voltage	V _F	-	1.35	1.6	V	I _f =100mA tp=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 =10mA
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

PRODUCTION QUANTITIES AVAILABLE MAY 2001.
 BASEEFA & ATEX CERTIFICATION WILL BE APPLIED
 FOR IN JULY 2001.WE WOULD BE PLEASED TO RE-
 CEIVE DRAFT SPECIFICATIONS REQUIRED BY ANY
 PROSPECTIVE USER.
 OPI2000M IN SHORT HOUSING ALSO AVAILABLE.

OPTO ELECTRONIC SOLUTIONS

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