



OPI 2000M High Speed Opto Isolator Surface Mount

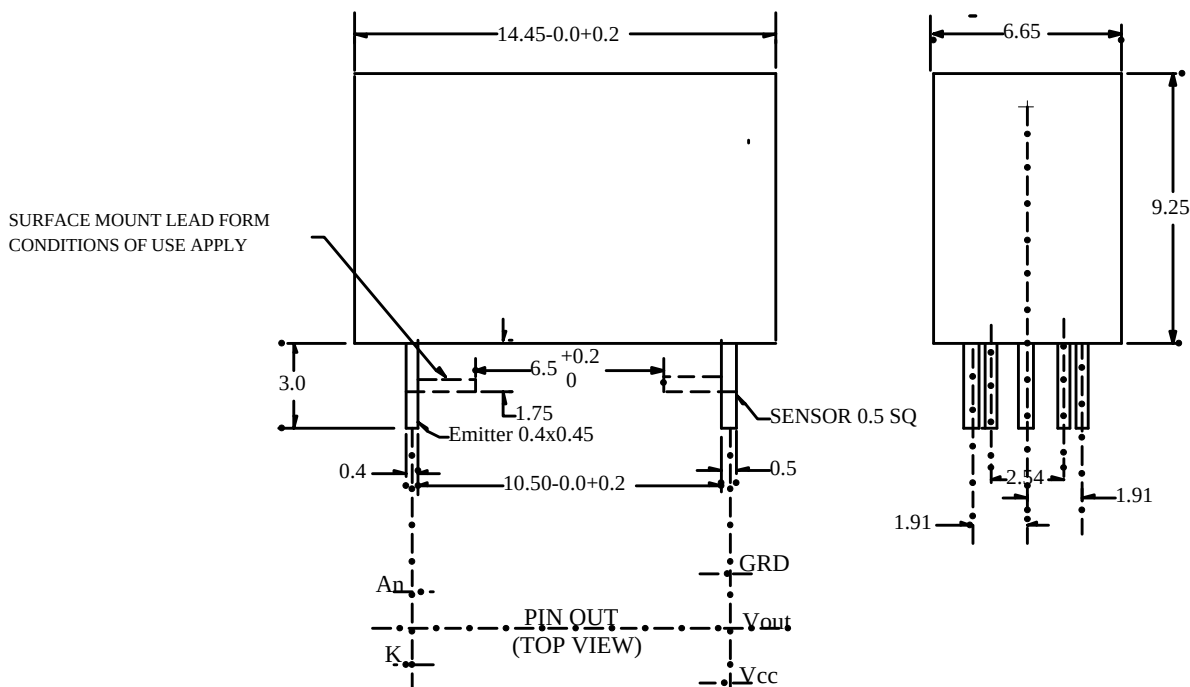
BASEEFA CERTIFICATE TO BE APPLIED FOR

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 meeting BASEEFA requirements.

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



MECHANICAL DATA



BEDFORD OPTO TECHNOLOGY LTD
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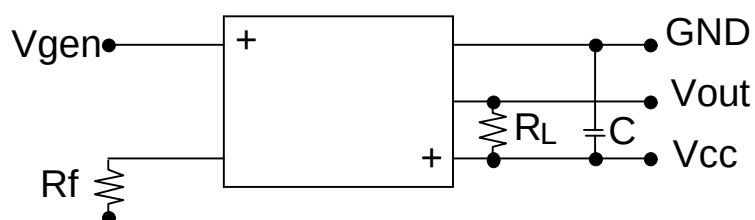
ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

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	± 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



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

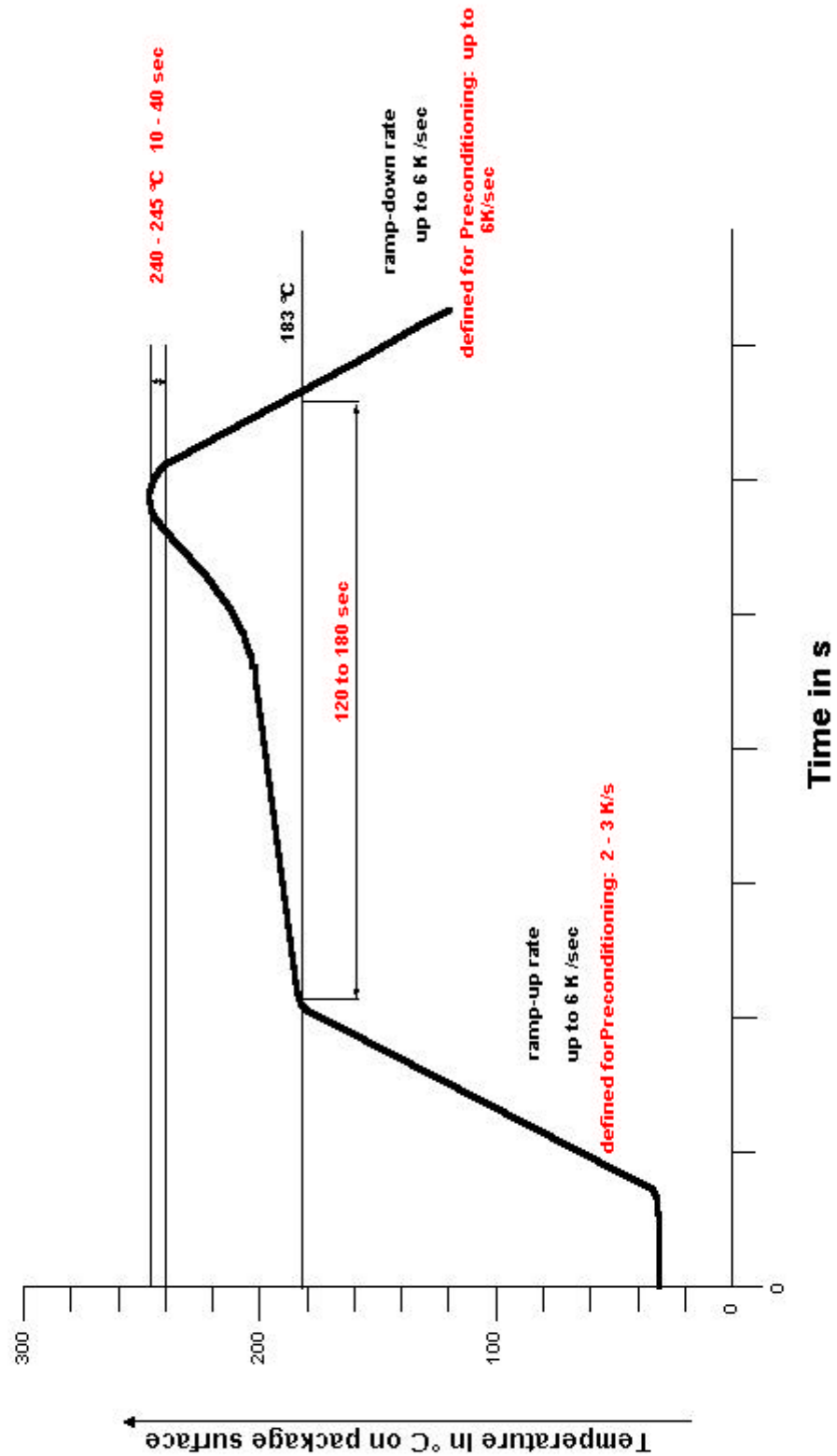
Packing

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

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

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IR Reflow soldering profile conforming to IPC9501



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OPTO ELECTRONIC DATA (TA = 25°C)

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 =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}	4kV			Volts	Input and output leads shorted

OPTO ELECTRONIC SOLUTIONS

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