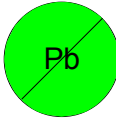


This component is RoHS compliant




OPI1264 Series Optically Coupled Isolators ATEX & IECEx

The OPI1264A/B/C/D are a family of optically coupled isolators, each consisting of an infrared light emitting diode, coupled to an NPN silicon phototransistor sealed in an injection moulded plastic housing. This series is designed for applications requiring high voltage isolation between input and output.

All electrical parameters are 100% tested by manufacturing. Specifications are guaranteed to a 0.65% AQL

- 10KV electrical rating



High current transfer ratio-100%min @1mA

ATEX 

CERTIFICATE ATEX BAS01ATEX1278U/1

Designed and manufactured to:- EN50020 1994
EN50014 1997
EN 50284 1999

Conditions of use apply:- EN50020 1994 clauses 6.4.9 and 8.8

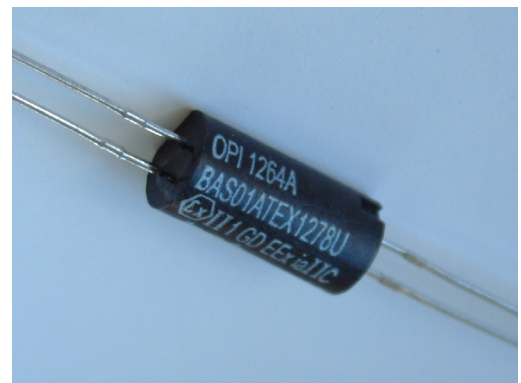
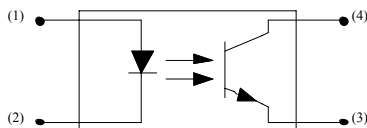
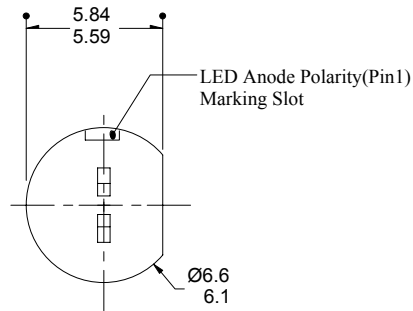
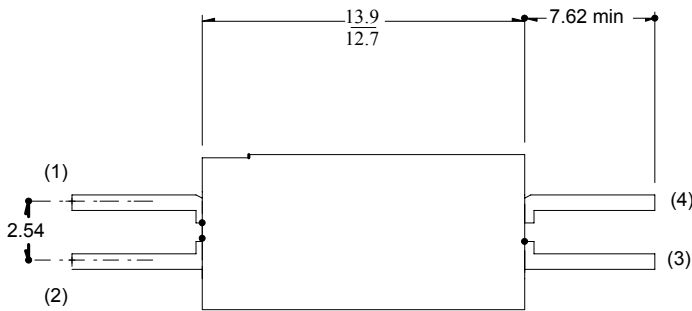
 

CERTIFICATE IECEx BAS 06.0021U

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

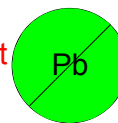


BEDFORD OPTO TECHNOLOGY LTD
1,BIGGAR BUSINESS PARK, BIGGAR,LANARKSHIRE ML12 6FX

Tel: +44 (0) 1899 221221 Fax: +44 (0) 1899 221009

Website: bot.co.uk E-mail: bill@bot.co.uk

This
component
is RoHS
compliant



ABSOLUTE MAXIMUM RATINGS (25 °C unless otherwise noted)

INPUT DIODE	
FORWARD DC CURRENT	50mA (3)
REVERSE DC VOLTAGE	2V
POWER DISSIPATION	100mW (4)
OUTPUT PHOTOTRANSISTOR	
COLLECTOR-EMITTER VOLTAGE	30 V
EMITTER-COLLECTOR VOLTAGE	5 V
POWER DISSIPATION	
OPERATING TEMP	-40°C TO +85°C
STORAGE TEMP	-40°C TO +85°C
INPUT-TO-OUTPUT ISOLATION VOLTAGE	+10KV DC (1)
LEAD SOLDERING TEMP (2) 1.6mm from case for 5sec with soldering iron	240°C

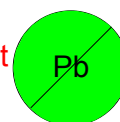
NOTES

- 1 Measured with input diode leads shorted together and output leads shorted together.
- 2 RMA Flux is recommended. Duration can be extended to 10 sec. max. when flow soldering.
- 3 Derate linearly 0.73 mA/°C above 25°C
- 4 Derate linearly 1.67 mW/°C above 25°C
- 5 Derate linearly 1.67 mW/°C above 25°C

Whilst the devices are capable of operating continually at the noted elevated temperatures users should be aware of the possibility of a reduction in CTR over long periods at high temperatures & currents.

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

This
component
is RoHS
compliant



OPTO ELECTRONIC DATA (T_A = 25°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDIS- TIONS
INPUT DIODE						
Forward Voltage	V _F			1.5	V	I _f = 20mA
Reverse Current	I _R			100	μA	V _r = 2V
OUTPUT PHOTOTRANSISTOR						
Collector-Emitter Breakdown	V _{(BR)CEO}	30			V	I _c = 1mA I _f = 0
Emitter-Collector Breakdown	V _{(BR)ECO}	5			V	I _e = 100μA
Collector-Emitter Dark Current	I _{CEO}			100	nA	V _{ce} = 10V
COUPLED CHARACTERISTICS						
DC Current transfer ratio	I _c /I _f					
OPI1264A		25			%	I _f =10mA V _{ce} =5V
OPI1264B		50			%	I _f =10mA V _{ce} =5V
OPI1264C		100			%	I _f =10mA V _{ce} =5V
OPI1264D		100			%	I _f =1mA, V _{ce} =5V
Isolation Voltage	V _{ISO}	10			KV	See Note
Collector-emitter saturation voltage	V _{CE(SAT)}			0.4	V	I _f =10mA,
Turn-on time	t _{on}		5		μS	I _c =10mA, V _{cc} =10V,
Turn-off time	t _{off}		5		μS	I _c =10mA, V _{cc} =10V,

NOTE:

Measured with input diode leads shorted together and output leads shorted together.
(Sample testing only).

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

3/3