

OPI 3000P

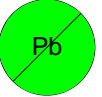
Optically Coupled Isolator

30kV Isolation

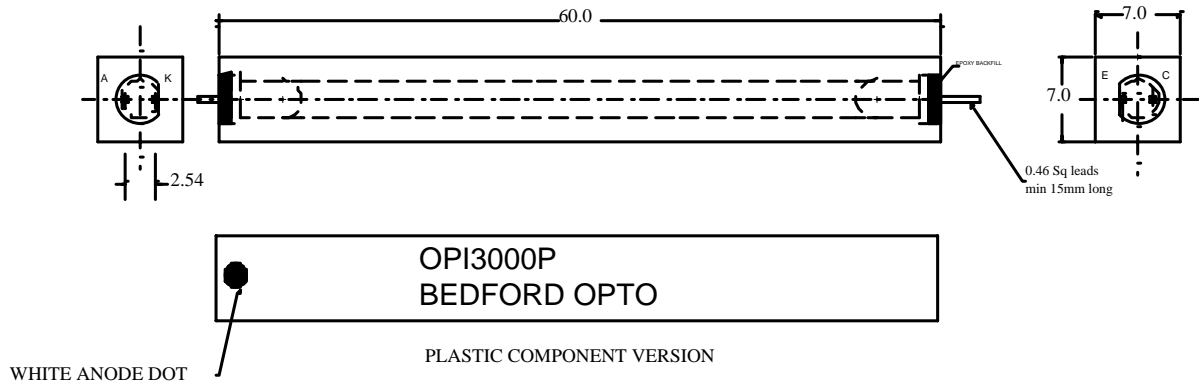
The OPI 3000P Optically Coupled Isolator consist of a Infrared emitter coupled to a silicon photo transistor. The series is designed for applications requiring high voltage isolation between input & output.

- 30kV Isolation
- High current transfer ratio,>50% @10mA
- Metal can version OPI30000MC with base connection also available.

This component is RoHS compliant



MECHANICAL DATA



ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

INPUT DIODE	
FORWARD DC CURRENT	100mA
REVERSE DC VOLTAGE	5 Volts
POWER DISSIPATION	165mW (ii)
OUTPUT TRANSISTOR	
COLLECTOR-EMITTER VOLTAGE	35 Volts
COLLECTOR CURRENT	15 mA
POWER DISSIPATION	165mW (iii)
OPERATING TEMP	-25°C TO +100°C
STORAGE TEMP	-25°C TO +100°C
INPUT-TO-OUTPUT ISOLATION VOLTAGE	±30KV DC (i)
SOLDERING TEMP 1.6mm from body max 5secs	240 °C

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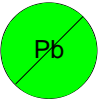
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- i) Based on mechanical spacing, not measured
- ii) Thermal resistance 375 K/W
- iii) Thermal resistance 450 K/W

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

This component is RoHS compliant



OPTO ELECTRONIC DATA (TA = 25°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
INPUT DIODE						
Forward Voltage	V _F	-	-	1.3	V	I _f = 20mA
Reverse Voltage	V _R	5.0	-	-	V	I _r = 100uA
OUTPUT TRANSISTOR						
Collector-Emitter Breakdown Voltage	BV _{ceo}	35	-	-	V	I _c = 10 uA
Collector-Emitter Leakage Current	I _{ceo}	-	-	10	nA	V _{ce} = 10 V
Emitter-Collector Breakdown	BV _{eco}	5.0	-	-	V	I _c = 100uA
COUPLED PAIR						
DC Current Transfer Ratio	I _c /I _f					
OPI 3000P	-	50	-	-	%	I _f = 10 mA V _{ce}
Isolation Voltage	V _{ISO}	30	-	-	KV	-
Collector-emitter saturation voltage	V _{CE(SAT)}	-	-	0.4	V	I _f = 10 mA,
Turn-on time	t _{on}	-	8	-	uS	I _c =2mA
Turn-off time	t _{off}	-	8	-	uS	V _{cc} = 5V

OPTO COUPLER RANGE

OPI110 TUBULAR 10kV ATEX CERTIFIED

OPI1264 TUBULAR 10kV ATEX CERTIFIED

OPI1000L SURFACE MOUNT ATEX CERTIFIED

OPI2000M HIGH SPEED SURFACE MOUNT ATEX CERTIFIED

OPI2000MK HIGH SPEED HIGH CMR

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