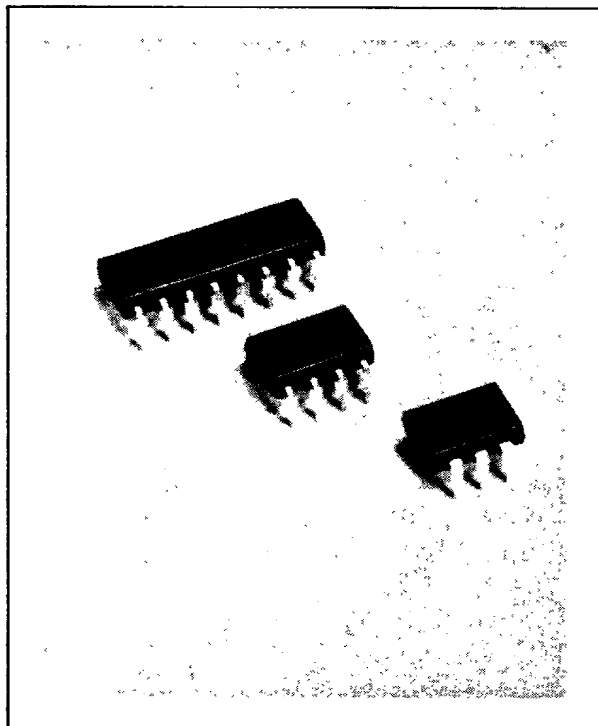




IS-202 ONE CHANNEL ISD-202 TWO CHANNEL ISQ-202 FOUR CHANNEL OPTICALLY COUPLED ISOLATORS

ISOCOM, INC.
274 E. HAMILTON AVE.
SUITE F
CAMPBELL, CA. 95008



FEATURES

- 5000 Volt Isolation
- High current transfer ratio (125% to 250%)
- Low cost dual-in-line package
- Single, dual, quad configuration

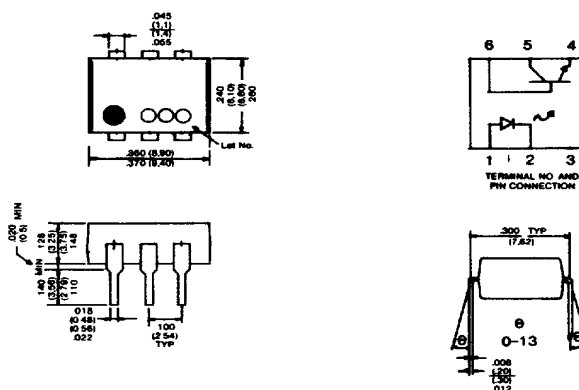
DESCRIPTION

The IS-202, ISD-202, ISQ-202, are optically coupled isolators. Each channel consists of a Gallium Arsenide infrared emitting diode and a NPN silicon phototransistor mounted in standard plastic dual-in-line packages. The IS-202 is a single channel isolator. The ISD-202 offers two channels per unit and the ISQ-202 offers four channels per unit.

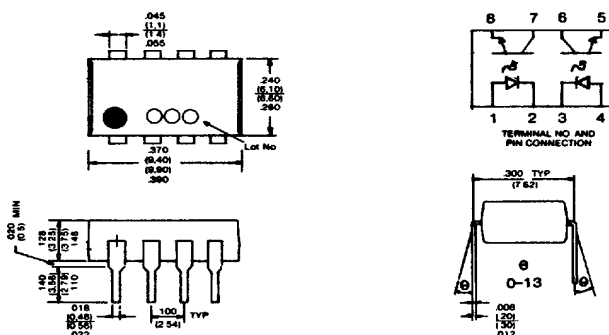
All electrical parameters are 100% tested. Specifications are guaranteed to a cumulative .65% AQL.

Package Dimensions in Inches (mm)

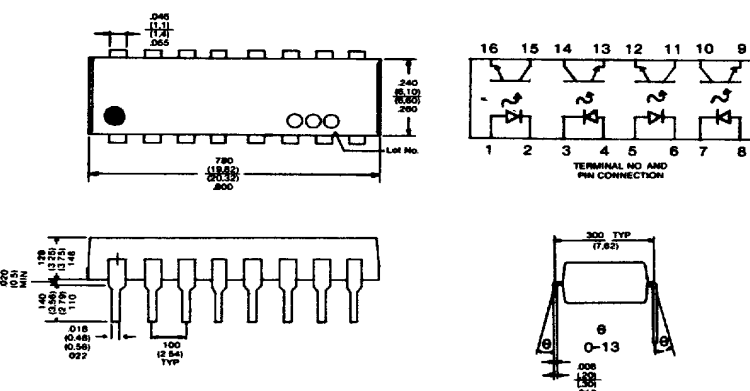
SINGLE CHANNEL (IS-202)



TWO CHANNEL (ISD-202)



FOUR CHANNEL (ISQ-202)



ABSOLUTE MAXIMUM RATINGS (25°C unless otherwise noted)

Storage Temperature -55°C to +150°C
 Operating Temperature -55°C to +100°C
 Lead Soldering Temperature (1/16 inch (1.6 mm) from case for 10 seconds) 260°C
 Input-to-Output Isolation Voltage (see note 1) ±5000 VDC

Input Diode

Forward DC Current 60 mA
 Reverse DC Voltage 3 V
 Peak Forward Current (PW. ≤ 100 μs, duty ratio 0.001) 1 A
 Power Dissipation (derate linearly 1.33 mW/°C above 25°C) 100 mW

Output Transistor

Collector-emitter voltage 30 V
 Emitter-collector voltage 7 V
 Power Dissipation (derate linearly 2.00 mW/°C 25°C) 150 mW

Package
Total Power Dissipation

IS-202 (derate linearly 2.67 mW/°C above 25°C) 200 mW
 ISD-202 (derate linearly 5.33 mW/°C above 25°C) 400 mW
 ISQ-202 (derate linearly 6.67 mW/°C above 25°C) 500 mW

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

	Parameter	Min.	Typ	Max	Units	Test Condition
Input	Forward Voltage (V _F)		1.2	1.5	Volt	I _F = 20 mA
	Forward Voltage (V _F)		1.0	1.2	Volt	I _F = 1 mA
	Reverse Current (I _R)			10	μA	V _R = 3 V
Output	H _{FE}	100	200			I _C = 100 μA, V _{CE} = 5 V
	Collector-emitter Voltage (BV _{CEO})	30			Volt	I _C = 1 mA
	Emitter-collector Voltage (BV _{ECO})	7			Volt	I _E = 0.1 mA
	Collector-emitter Dark Current (I _{CEO})			50	nA	V _{CE} = 10 V
Coupled	DC Current Transfer Ratio (CTR)	125		250	%	I _F = 10 mA, V _{CE} = 10 V
	DC Current Transfer Ratio (CTR)	30	50		%	I _F = 1 mA, V _{CE} = 10 V
	Collector-emitter Saturation Voltage V _{CE} (Sat)		0.2	0.4	Volt	I _F = 10 mA, I _C = 2 mA
	Floating Capacitance (C _F)		0.6	1.0	pf	V = 0 f = 1 mhz
	Input-to-Output Isolation Resistance R _{iso}	5x10 ¹¹			ohm	V _{IO} = 500 V (see note 1)

Note 1: Measured with input leads shorted together and output leads shorted together