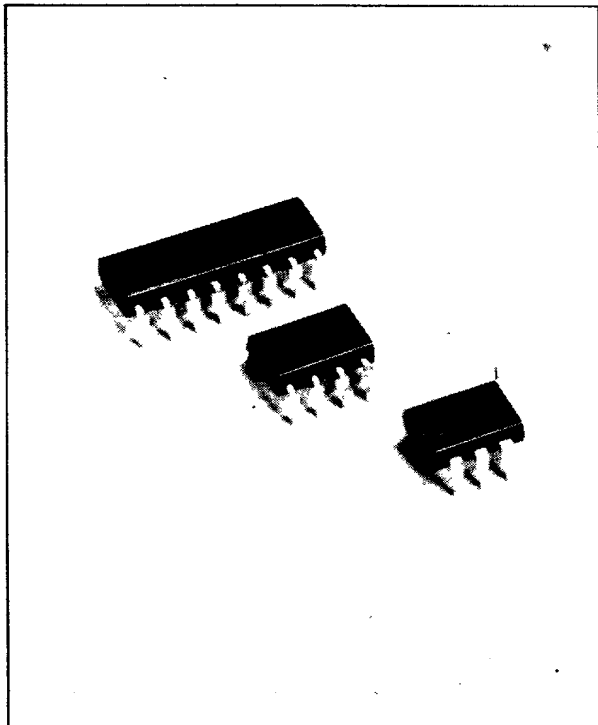




IS-74 ONE CHANNEL
ISD-74 TWO CHANNEL
ISQ-74 FOUR CHANNEL
OPTICALLY COUPLED ISOLATORS

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



FEATURES

- 1500 Volt Isolation
- High current transfer ratio – 50% typical
- Low cost dual-in-line package
- Single, dual, quad configuration

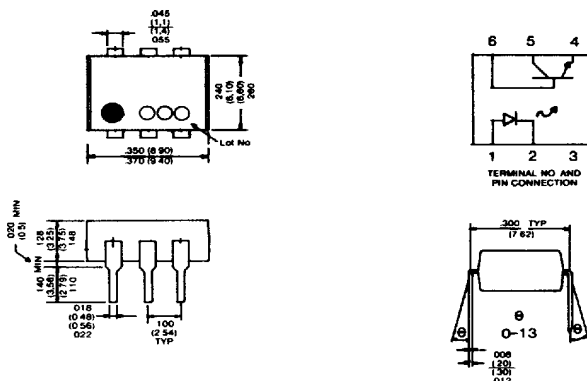
DESCRIPTION

The IS-74, ISD-74, ISQ-74 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-74 is a single channel isolator. The ISD-74 offers two channels per unit and the ISQ-74 offers four channels per unit.

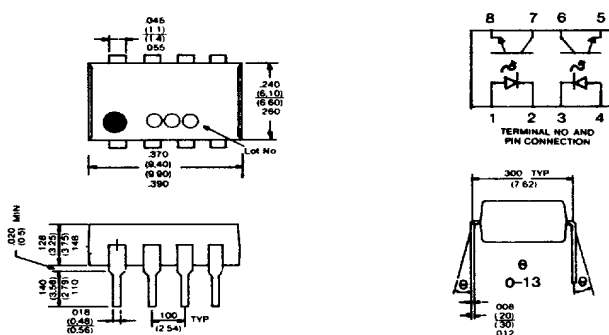
**All electrical parameters are 100% tested.
Specifications are guaranteed to a cumulative
.65% AQL.**

Package Dimensions in Inches (mm)

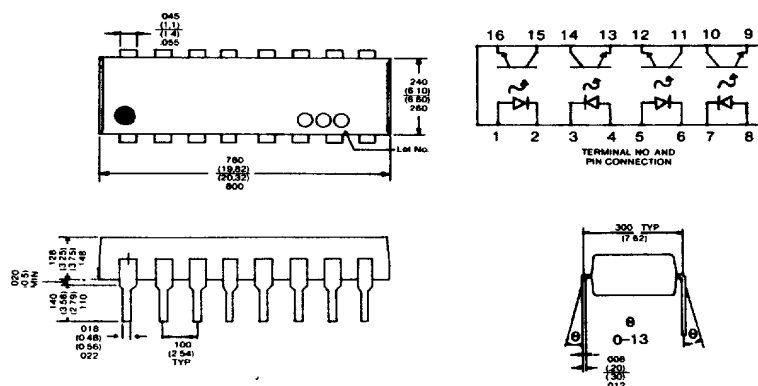
SINGLE CHANNEL (IS-74)



TWO CHANNEL (ISD-74)



FOUR CHANNEL (ISQ-74)



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) ± 1500 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 20V
 Power Dissipation (derate linearly 2.00 mW/°C 25°C) 150 mW

Package
Total Power Dissipation

IS-74 (Derate linearly 2.67 mW/°C above 25°C) 200 mW
 ISD-74 (Derate linearly 5.33 mW/°C above 25°C) 400 mW
 ISQ-74 (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)		1.3	1.5	Volt	I _F = 60 mA
	Reverse Current (I _R)			10	μA	V _R = 3 V
Output	Collector-emitter Voltage (BV _{CEO})	20	45		Volt	I _C = 1 mA
	Collector-emitter Dark Current (I _{CEO})		3	500	nA	V _{CE} = 5 V
Coupled	DC Current Transfer Ratio (CTR)	12.5	50		%	I _F = 16 mA, V _{CE} = 5 V
	Collector-emitter Saturation Voltage V _{CE} (Sat)		0.3	0.5	Volt	I _F = 16 mA, I _C = 2.0 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