

ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)

Storage Temperature	-55°C to + 125°C
Operating Temperature	-55°C to + 100°C
Lead Soldering Temperature (1/16 inch (1.6mm) from case for 10 secs)	260°C

INPUT DIODE

Forward Current	50mA
Reverse Voltage	6V
Power Dissipation	70mW

OUTPUT TRANSISTOR

Collector-emitter Voltage BV _{CEO}	35V
Emitter-collector Voltage BV _{ECO}	6V
Power Dissipation	150mW

POWER DISSIPATION

Total Power Dissipation	200mW
(derate linearly 2.67mW/°C above 25°C)	

ELECTRICAL CHARACTERISTICS (T_A = 25°C Unless otherwise noted)

PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V _F) Reverse Voltage (V _R) Reverse Current (I _R)	5	1.2	1.4	V V μA	I _F = 20mA I _R = 10μA V _R = 5V
Output	Collector-emitter Breakdown (BV _{CEO}) (Note 2) Emitter-collector Breakdown (BV _{ECO}) Collector-emitter Dark Current (I _{CEO})	35			V	I _C = 0.5mA
		6		100	V nA	I _E = 100μA V _{CE} = 10V
Coupled	Current Transfer Ratio (CTR) (Note 2) TIL197, TIL198, TIL199 TIL197A, TIL198A, TIL199A TIL197B, TIL198B, TIL199B	500 1000 1500		7500 7500 7500		2mA I _F , 1V V _{CE} 2mA I _F , 1V V _{CE} 2mA I _F , 1V V _{CE}
	Collector-emitter Saturation Voltage V _{CE (SAT)}		0.8	1.0	V	2mA I _F , 10mA I _C
	Input to Output Isolation Voltage V _{ISO}	5300 7500			V _{RMS} V _{PK}	See note 1 See note 1
	Input-output Isolation Resistance R _{ISO}	5x10 ¹⁰			Ω	V _{IO} = 500V (note 1)
	Output Rise Time tr		100		μs	V _{CC} = 10V ,
	Output Fall Time tf		100		μs	I _C = 10mA, R _L = 100Ω

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

Note 2 Special Selections are available on request. Please consult the factory.

