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	5V
Power Dissipation	70mW

OUTPUT TRANSISTOR

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

POWER DISSIPATION

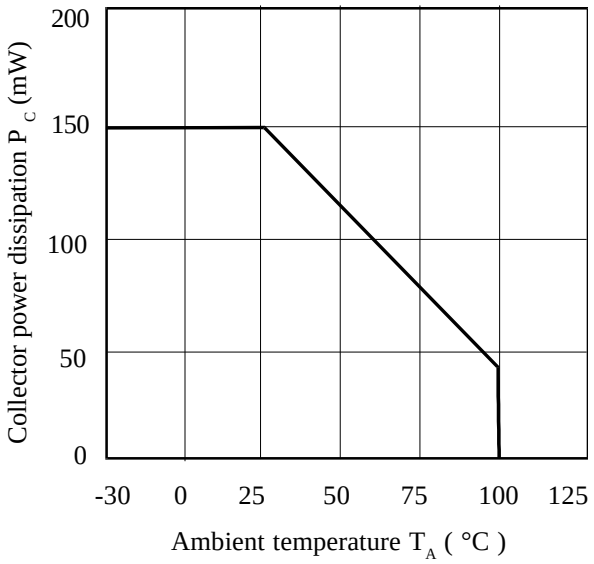
Total Power Dissipation	200mW
(derate linearly 2.67mW/°C above 25°C)	

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

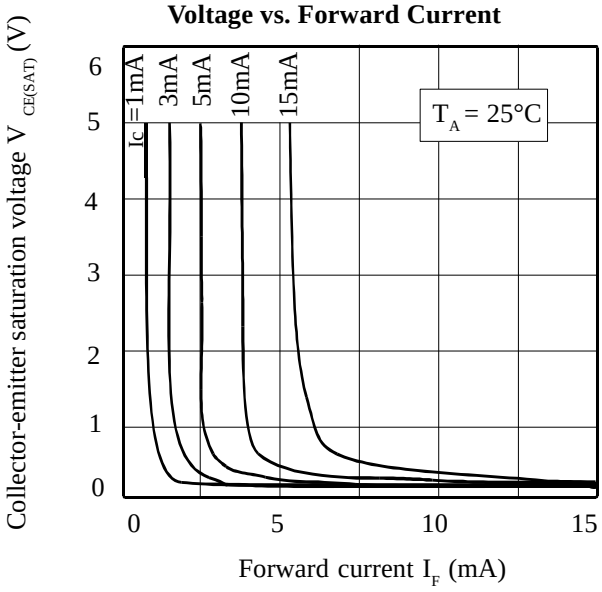
PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.4	V	I_F = 20mA
	Reverse Voltage (V_R)	5			V	I_R = 10µA
	Reverse Current (I_R)			10	µA	V_R = 5V
Output	Collector-emitter Breakdown (BV_{CEO}) (Note 2)	35			V	I_C =0.5mA
	Emitter-collector Breakdown (BV_{ECO})	6			V	I_E = 100µA
	Collector-emitter Dark Current (I_{CEO})			100	nA	V_{CE} = 24V
Coupled	Current Transfer Ratio (CTR) (Note 2)					
	TIL191, TIL192, TIL193	20			%	5mA I_F, 5V V_{CE}
	TIL191A, TIL192A, TIL193A	50			%	
	TIL191B, TIL192B, TIL193B	100			%	
	Collector-emitter Saturation Voltage $V_{CE\ (SAT)}$			0.4	V	5mA I_F, 1mA I_C
	Input to Output Isolation Voltage V_{ISO}	5300			V_{RMS}	See note 1
		7500			V_{PK}	See note 1
	Input-output Isolation Resistance R_{ISO}	$5x10^{10}$			Ω	V_{IO} = 500V (note 1)
	Output Rise Time tr		6		µs	V_{CC} = 5V ,
	Output Fall Time tf		6		µs	I_C = 2mA, R_L = 100Ω

Note 2 Measured with input leads shorted together and output leads shorted together.
Special Selections are available on request. Please consult the factory.

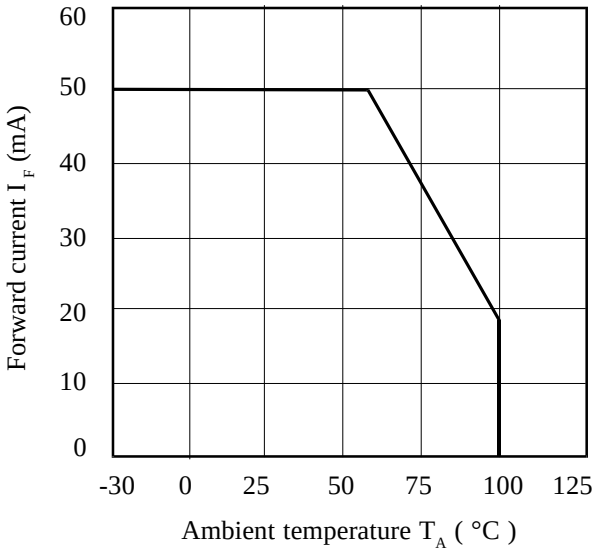
Collector Power Dissipation vs. Ambient Temperature



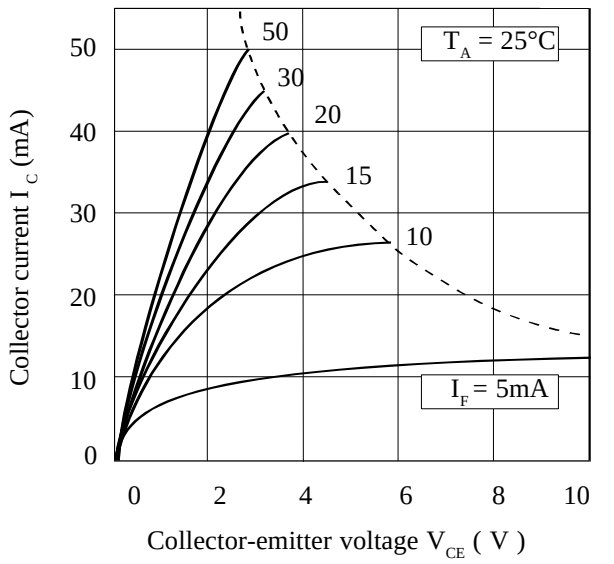
Collector-emitter Saturation Voltage vs. Forward Current



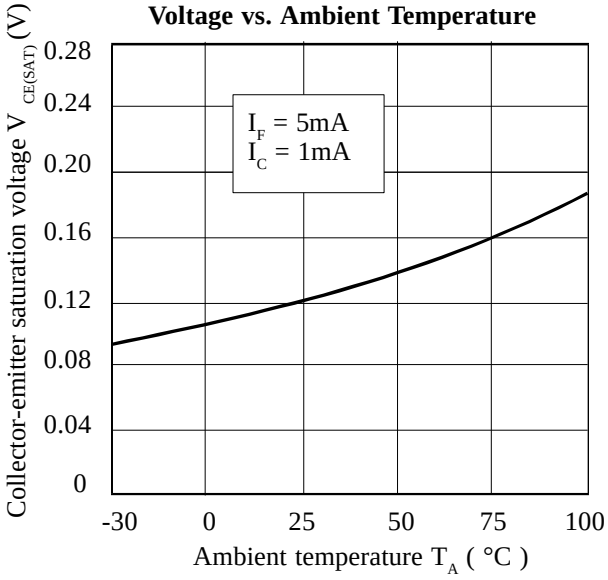
Forward Current vs. Ambient Temperature



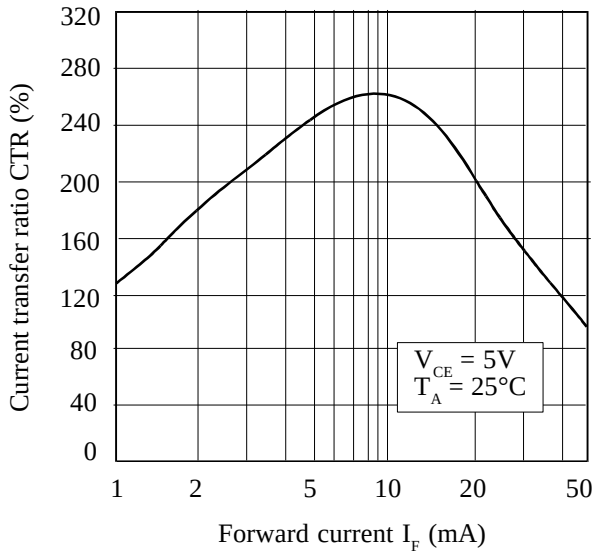
Collector Current vs. Collector-emitter Voltage



Collector-emitter Saturation Voltage vs. Ambient Temperature



Current Transfer Ratio vs. Forward Current



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