

ABSOLUTE MAXIMUM RATINGS
(25°C unless otherwise specified)

Storage Temperature _____ -55°C to +125°C
Operating Temperature _____ -30°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} _____ 80V
Emitter-collector Voltage BV_{ECO} _____ 6V
Collector Current _____ 50mA
Power Dissipation _____ 150mW

POWER DISSIPATION

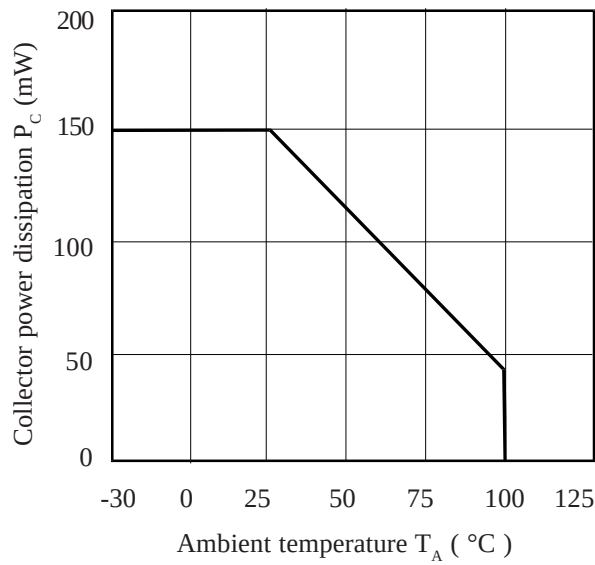
Total Power Dissipation _____ 200mW
(derate linearly 2.67mW/°C above 25°C)

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted)

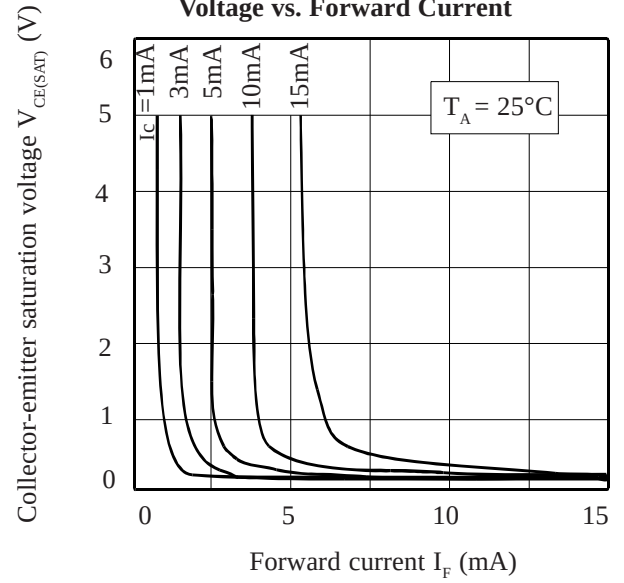
PARAMETER		MIN	TYP	MAX	UNITS	TEST CONDITION
Input	Forward Voltage (V_F)		1.2	1.4	V	$I_F = 20\text{mA}$
	Reverse Current (I_R)			10	μA	$V_R = 4\text{V}$
Output	Collector-emitter Breakdown (BV_{CEO})	80			V	$I_C = 1\text{mA}$
	Emitter-collector Breakdown (BV_{ECO})	6			V	$I_E = 100\mu\text{A}$
	Collector-emitter Dark Current (I_{CEO})			100	nA	$V_{CE} = 20\text{V}$
Coupled	Current Transfer Ratio (CTR) (Note 2)					
		50		600	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	GB	100		600	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	BL	200		600	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	A	80		160	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	B	130		260	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	C	200		400	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	D	300		600	%	$5\text{mA } I_F, 5\text{V } V_{CE}$
	Collector-emitter Saturation Voltage $V_{CE(SAT)}$			0.2	V	$20\text{mA } I_F, 1\text{mA } I_C$
	Input to Output Isolation Voltage V_{ISO}		5300	7500	V_{RMS} PK	See note 1 See note 1
	Input-output Isolation Resistance R_{ISO}		5×10^{10}		Ω	$V_{IO} = 500\text{V}$ (note 1)
	Output Rise Time tr		4	18	μs	$V_{CE} = 2\text{V}$,
	Output Fall Time tf		3	18	μs	$I_C = 2\text{mA}, R_L = 100\Omega$

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.

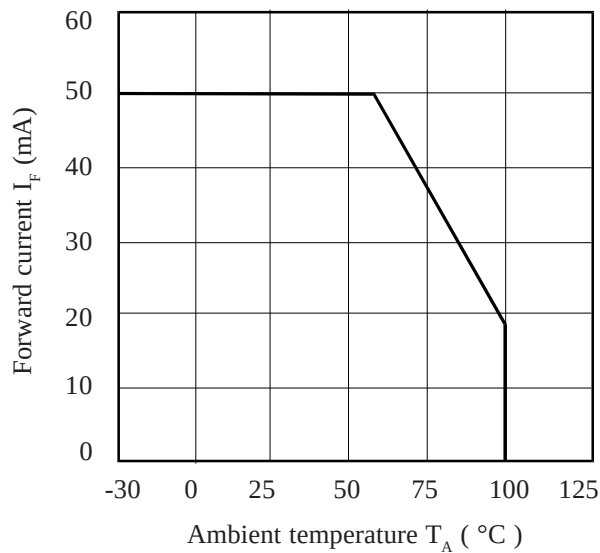
Collector Power Dissipation vs. Ambient Temperature



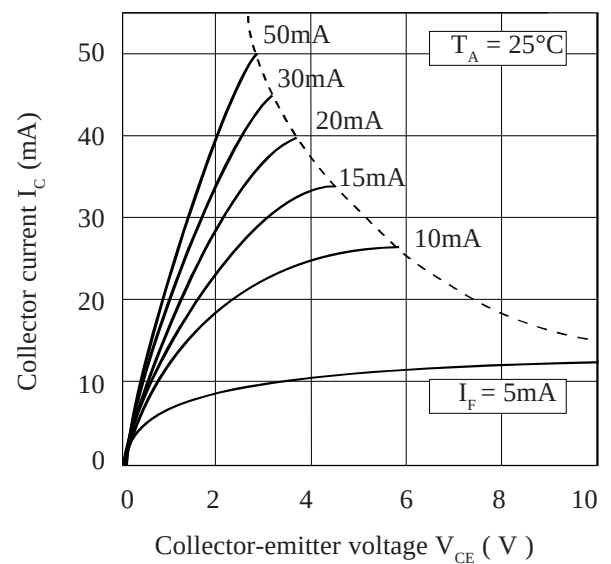
Collector-emitter Saturation Voltage vs. Forward Current



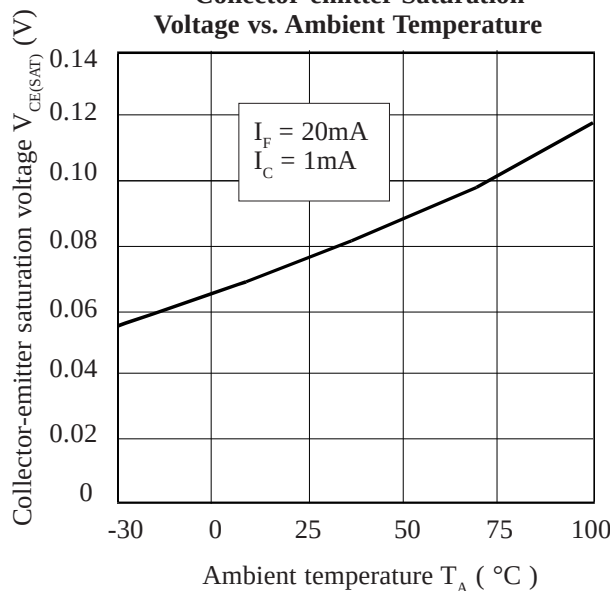
Forward Current vs. Ambient Temperature



Collector Current vs. Collector-emitter Voltage



Collector-emitter Saturation Voltage vs. Ambient Temperature



Current Transfer Ratio vs. Forward Current

