

Absolute Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Collector-Emitter Voltage (V _{BE} = 0V)	V _{CES}	800	V
Collector-Emitter Voltage	V _{CEO}	450	V
Emitter-Base Voltage	V _{EBO}	9	V
Continuous Collector Current	I _C	0.8	A
Peak Pulse Collector Current	I _{CM}	1.6	A
Continuous Base Current	I _B	0.4	A
Peak Pulse Base Current	I _{BM}	0.8	A

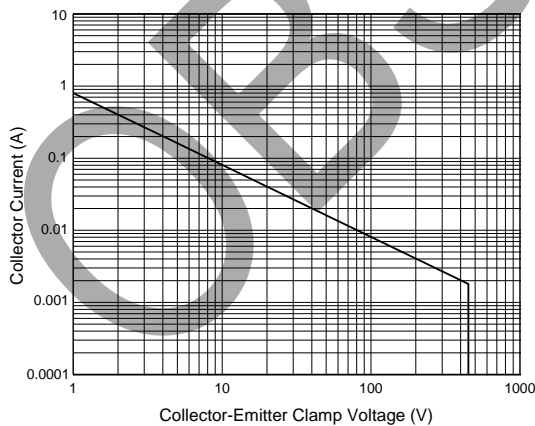
Thermal Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Power Dissipation	P _D	0.8	W
Thermal Resistance, Junction to Ambient Air	R _{θJA}	156.25	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

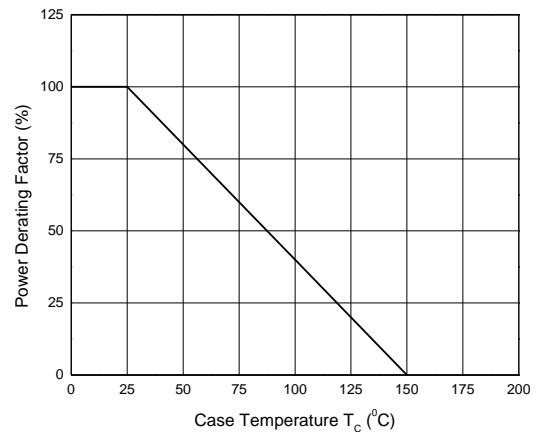
ESD Ratings (Note 5)

Characteristic	Symbol	Value	Unit	JEDEC Class
Electrostatic Discharge - Human Body Model	ESD HBM	8,000	V	3B
Electrostatic Discharge - Machine Model	ESD MM	400	V	C

Note: 5. Refer to JEDEC specification JESD22-A114 and JESD22-A115.

Safe Operating Area and Derating Information (@T_A = +25°C, unless otherwise specified.)


Safe Operating Areas



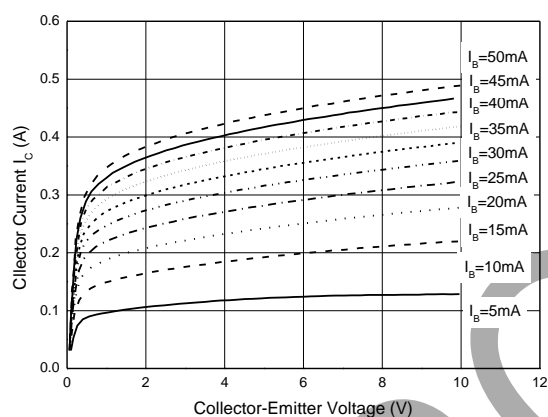
Power Derating Curve

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

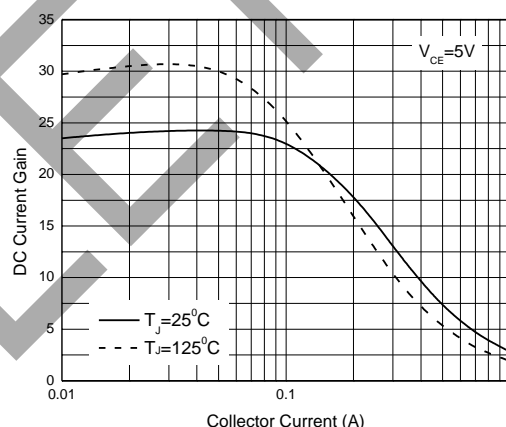
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Collector-Emitter Breakdown Voltage	BV _{CES}	800	—	—	V	I _C = 100μA, V _{BE} = 0V
Collector-Emitter Breakdown Voltage	BV _{CEO}	450	—	—	V	I _C = 100μA
Emitter-Base Breakdown Voltage	BV _{EBO}	9	—	—	V	I _E = 100μA
Collector Cutoff Current	I _{CEV}	—	—	10	μA	V _{CE} = 800V, V _{BE} = -1.5V
Collector-Emitter Saturation Voltage	V _{CE(sat)}	—	—	0.5	V	I _C = 200mA, I _B = 40mA
DC Current Transfer Static Ratio (Note 6)	h _{FE}	15 6	23 15	40 30	—	I _C = 100mA, V _{CE} = 10V I _C = 300mA, V _{CE} = 10V

Note: 6. Measured under pulsed conditions. Pulse width ≤ 300μs. Duty cycle ≤ 2%.

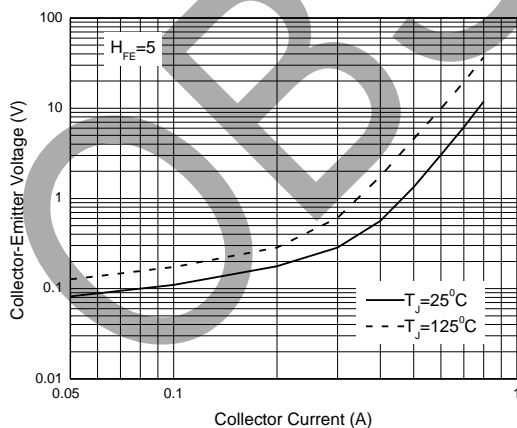
Typical Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)



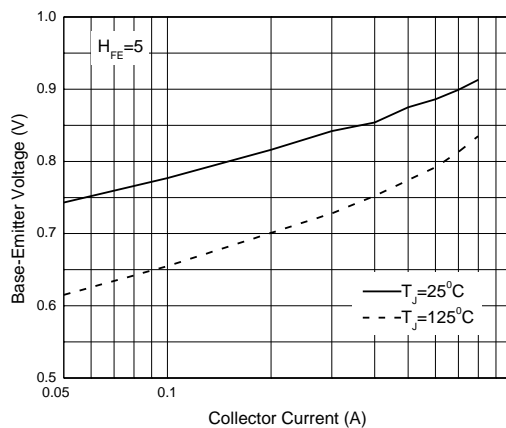
Static Characteristics



DC Current Gain



Collector-Emitter Saturation Region

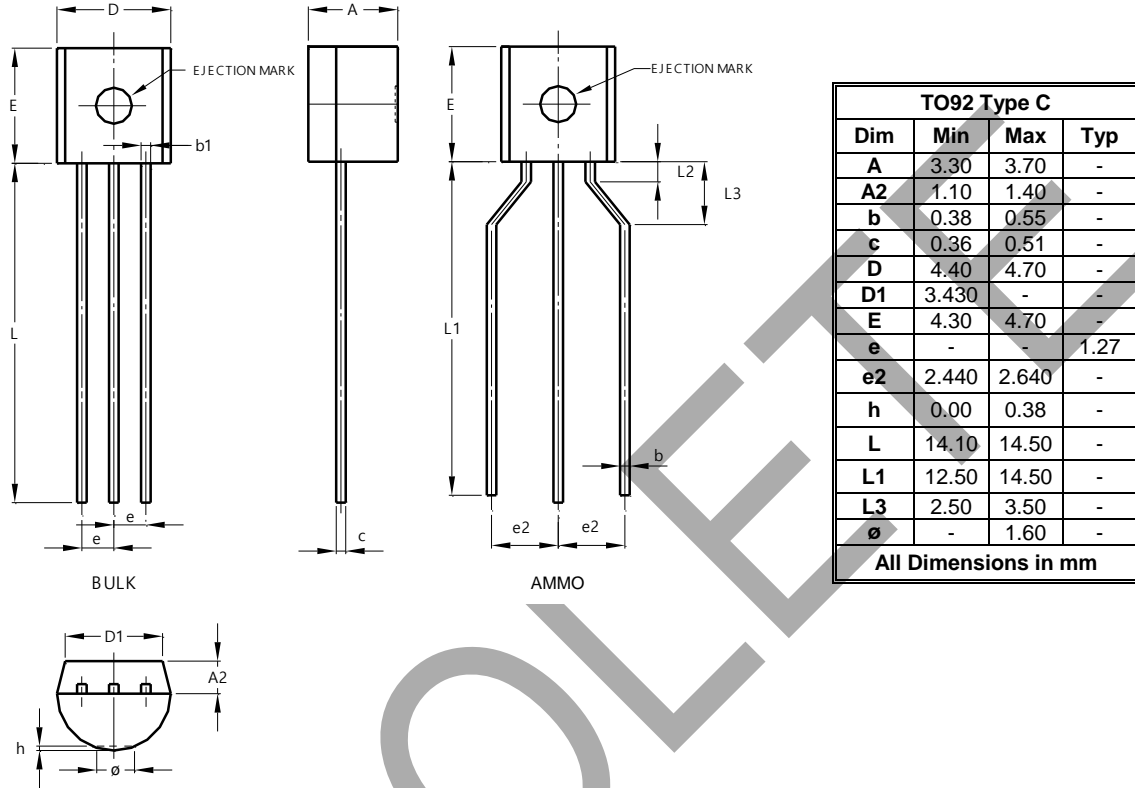


Base-Emitter Saturation Voltage

Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(1) Package Type: TO92 Type C



Note: For high voltage applications, the appropriate industry sector guidelines should be considered with regards to creepage and clearance distances between device Terminals and PCB tracking.

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