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

Characteristic	Symbol	Value	Unit
Collector-Emitter Voltage (V_{BE} = 0V)	V_{CES}	700	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.)

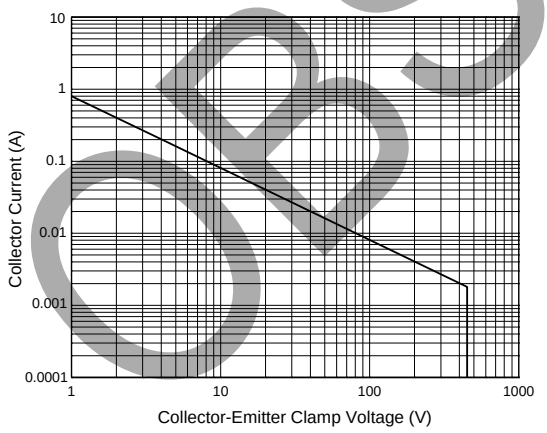
Characteristic	Symbol	Value	Unit
Power Dissipation	P_D	0.8	W
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	156.25	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

ESD Ratings (Note 5)

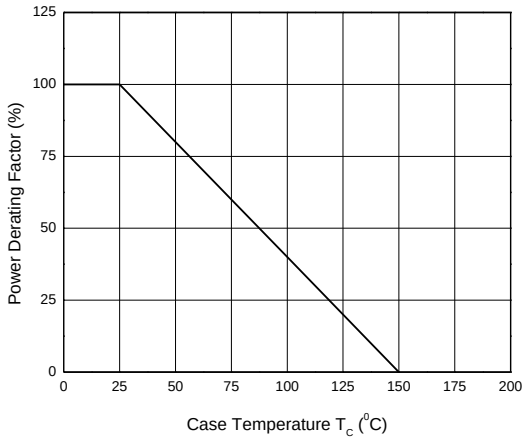
Characteristic	Symbol	Value	Unit	JEDEC Class
Electrostatic Discharge - Human Body Model	ESD HBM	8,000	V	3B
Electrostatic Discharge - Machine Model	ESD MM	400	V	C

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



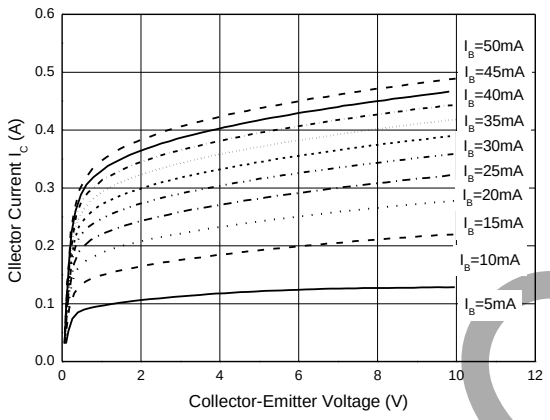
Power Derating Curve

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

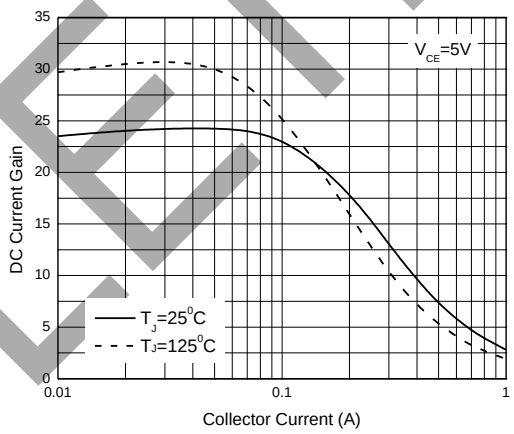
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Collector-Emitter Breakdown Voltage	BV_{CES}	700	—	—	V	I_C = 100µA, V_{BE} = 0V
Collector-Emitter Breakdown Voltage	BV_{CEO}	450	—	—	V	I_C = 100µA
Emitter-Base Breakdown Voltage	BV_{EBO}	9	—	—	V	I_E = 100µA
Collector Cutoff Current	I_{CEV}	—	—	10	µA	V_{CE} = 700V, 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%.

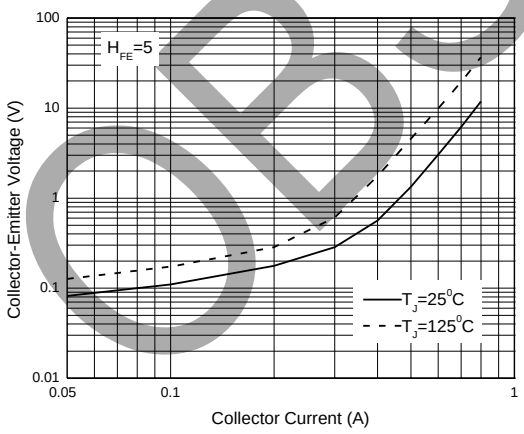
Typical Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)



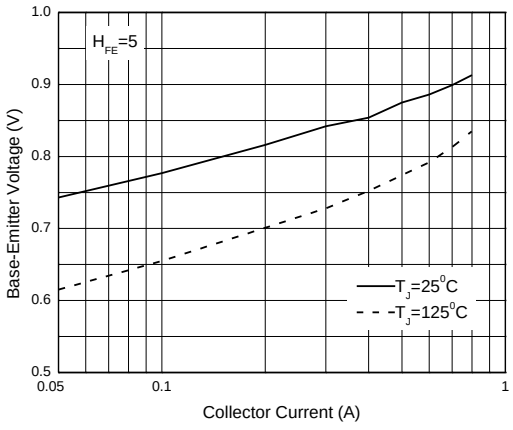
Static Characteristics



DC Current Gain



Collector-Emitter Saturation Region

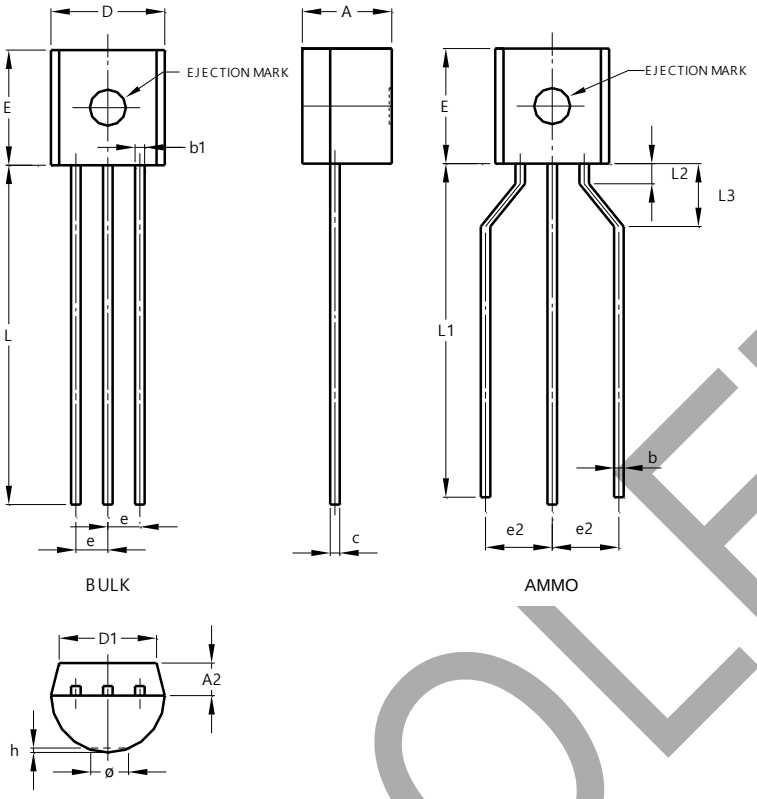


Base-Emitter Saturation Voltage

Package Outline Dimensions

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

(1) Package Type: TO92 Type C



TO92 Type C			
Dim	**Min**	**Max**	**Typ**
A	3.30	3.70	-
A2	1.10	1.40	-
b	0.38	0.55	-
c	0.36	0.51	-
D	4.40	4.70	-
D1	3.430	-	-
E	4.30	4.70	-
e	-	-	1.27
e2	2.440	2.640	-
h	0.00	0.38	-
L	14.10	14.50	-
L1	12.50	14.50	-
L3	2.50	3.50	-
ø	-	1.60	-
All Dimensions in mm			

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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