

MAXIMUM RATINGS

Rating	Symbol	BF258	BF259	Unit
Collector-Emitter Voltage	V_{CE0}	250	300	Vdc
Collector-Emitter Voltage	V_{CER}	250	300	Vdc
Collector-Base Voltage	V_{CB0}	250	300	Vdc
Emitter-Base Voltage	V_{EBO}	5.0		Vdc
Collector Current — Continuous	I_C	0.1		Adc
Total Device Dissipation ($\alpha T_A = 25^\circ\text{C}$ Derate above 25°C)	P_D	0.8	4.57	Watt mW°C
Total Device Dissipation ($\alpha T_C = 25^\circ\text{C}$ Derate above 25°C)	P_D	5.0	28.6	Watt mW°C
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200		$^\circ\text{C}$

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	35	$^\circ\text{C/W}$

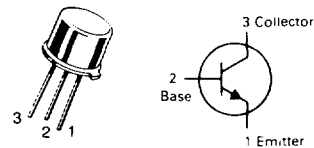
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage(1) ($I_C = 30 \text{ mAdc}, I_E = 0$)	$V_{(BR)CEO}$	250 300	—	—	Vdc
Collector-Base Breakdown Voltage ($I_C = 100 \mu\text{Adc}, I_E = 0$)	$V_{(BR)CB0}$	250 300	—	—	Vdc
Emitter-Base Breakdown Voltage ($I_E = 100 \mu\text{Adc}, I_C = 0$)	$V_{(BR)EBO}$	5.0	—	—	Vdc
Collector Cutoff Current ($V_{CB} = 200 \text{ Vdc}, I_E = 0$) ($V_{CB} = 250 \text{ Vdc}, I_E = 0$)	I_{CBO}	— —	1.0 1.0	50 50	nAdc
ON CHARACTERISTICS(1)					
DC Current Gain ($I_C = 30 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}$)	h_{FE}	25	80	—	—
Collector-Emitter Saturation Voltage ($I_C = 30 \text{ mAdc}, I_B = 6.0 \text{ mAdc}$)	$V_{CE(sat)}$	—	0.1	1.0	Vdc
DYNAMIC CHARACTERISTICS					
Current Gain-Bandwidth Product ($I_C = 30 \text{ mAdc}, V_{CE} = 10 \text{ Vdc}, f = 100 \text{ MHz}$)	f_T	—	110	—	MHz
Reverse Transfer Capacitance ($V_{CB} = 30 \text{ Vdc}, I_E = 0, f = 1.0 \text{ MHz}$)	C_{re}	—	3.5	—	pF
Collector-Base Capacitance ($V_{CB} = 10 \text{ Vdc}, I_E = 0, f = 1.0 \text{ MHz}$)	C_{cb}	—	5.5	—	pF

(1) Pulse Test: Pulse Width $\leq 300 \mu\text{s}$, Duty Cycle $\leq 2.0\%$.

BF258 BF259

CASE 79-04, STYLE 1
TO-39 (TO-205AD)



**HIGH VOLTAGE
TRANSISTORS**
NPN SILICON