

SEMICONDUCTOR®

BC337/338

Switching and Amplifier Applications

• Suitable for AF-Driver stages and low power output stages

Complement to BC327/BC328



NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CES}	Collector-Emitter Voltage		
	: BC337	50	V
	: BC338	30	V
V _{CEO}	Collector-Emitter Voltage		
	: BC337	45	V
	: BC338	25	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current (DC)	800	mA
I _C P _C	Collector Power Dissipation	625	mW
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 ~ 150	°C

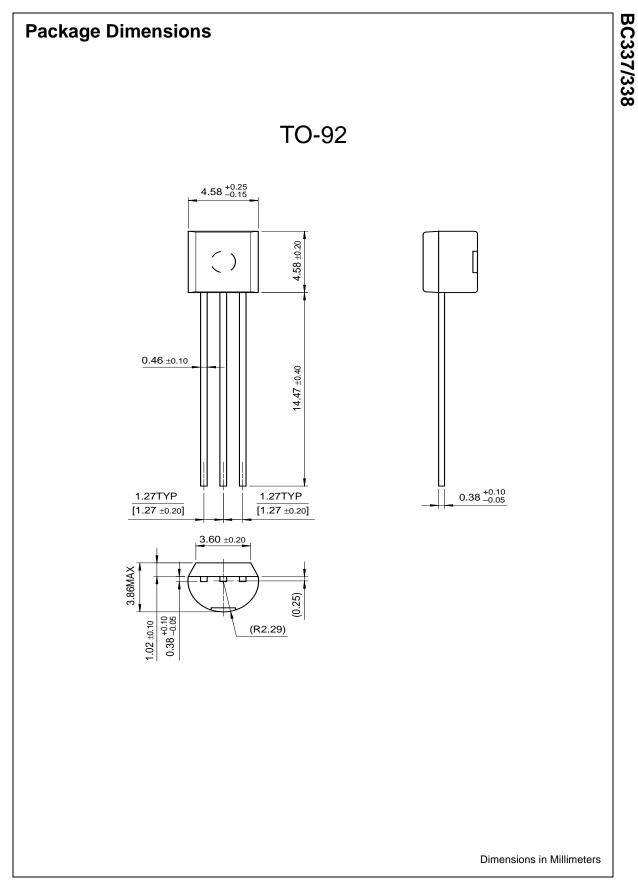
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C =10mA, I _B =0				
	: BC337	-	45			V
	: BC338		25			V
BV _{CES}	Collector-Emitter Breakdown Voltage	I _C =0.1mA, V _{BE} =0				
	: BC337		50			V
	: BC338		30			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E =0.1mA, I _C =0	5			V
I _{CES}	Collector Cut-off Current					
	: BC337	V _{CE} =45V, I _B =0		2	100	nA
	: BC338	V _{CE} =25V, I _B =0		2	100	nA
h _{FE1}	DC Current Gain	V _{CE} =1V, I _C =100mA	100		630	
h _{FE2}		V _{CE} =1V, I _C =300mA	60			
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C =500mA, I _B =50mA			0.7	V
V _{BE} (on)	Base Emitter On Voltage	V _{CE} =1V, I _C =300mA			1.2	V
f _T	Current Gain Bandwidth Product	V _{CE} =5V, I _C =10mA, f=50MHz		100		MHz
C _{ob}	Output Capacitance	V _{CB} =10V, I _E =0, f=1MHz		12		pF

h_{FE} Classification

Classification	16	25	40
h _{FE1}	100 ~ 250	160 ~ 400	250 ~ 630
h _{FE2}	60-	100-	170-

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Rev. A2, August 2002

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