

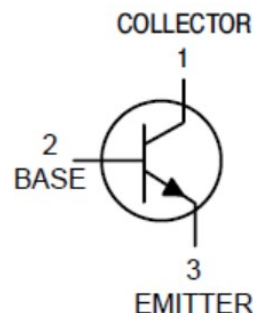
BC338

Features

- The NPN Bipolar Transistor is designed for use in linear and switching applications. The device is housed in the TO-92 package, which is designed for medium power applications.
- These are PbFree Devices
- Complement to:BC328

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	BV_{CBS}	30	V
Collector-emitter voltage	BV_{CEO}	25	V
Emitter-base voltage	BV_{EBO}	5	V
Collector current	I_{CM}	800	mA
Collector Power Dissipation	P_C	0.625	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CES}	$I_C=100\mu A, I_E=0$	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=10mA, I_B=0$	25			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	5			V
collector-emitter cut-off current	I_{CES}	$V_{CE}=25V, I_B=0$			0.1	μA
DC current gain	H_{FE1}	$V_{CE}=1V, I_C=100mA$	100		630	
DC current gain	H_{FE2}	$V_{CE}=1V, I_C=300mA$	60			
collector-emitter saturation voltage	V_{CESAT}	$I_C=500mA, I_B=50mA$			0.7	V
Base-Emitter On Voltage	V_{BEON}	$V_{CE}=1V, I_C=300mA$			1.2	V
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA$		100		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10 V, f = 1.0 MHz$		15		pF

Classification of H_{FE}

Rank	16	25	40
Range	100-250	160-400	250-630