



# FUKUCOM COMPANY LTD.

## 福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

### BC337...BC338

#### NPN Silicon Epitaxial Planar Transistor

for switching and amplifier applications

These types are subdivided into three groups -16, -25 and -40, according to their DC current gain.



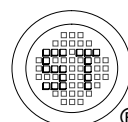
1. Collector 2. Base 3. Emitter  
TO-92 Plastic Package

#### Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

Parameter	Symbol	BC337	BC338	Unit
Collector Base Voltage	V <sub>CBO</sub>	50	30	V
Collector Emitter Voltage	V <sub>CEO</sub>	45	25	V
Emitter Base Voltage	V <sub>EBO</sub>	5		V
Collector Current	I <sub>C</sub>	800		mA
Peak Collector Current	I <sub>CM</sub>	1		A
Total Power Dissipation	P <sub>tot</sub>	625		mW
Junction Temperature	T <sub>J</sub>	150		°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 150		°C

#### Characteristics at T<sub>a</sub> = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V <sub>CE</sub> = 1 V, I <sub>C</sub> = 100 mA Current Gain Group	-16	h <sub>FE</sub>	100	-	250	-
	-25	h <sub>FE</sub>	160	-	400	-
	-40	h <sub>FE</sub>	250	-	630	-
	at V <sub>CE</sub> = 1 V, I <sub>C</sub> = 300 mA	h <sub>FE</sub>	60	-	-	-
Collector Base Cutoff Current at V <sub>CB</sub> = 50 V	BC337	I <sub>CBO</sub>	-	-	100	nA
	BC338	I <sub>CBO</sub>	-	-	100	nA
Collector Base Breakdown Voltage at I <sub>C</sub> = 100 μA	BC337	V <sub>(BR)CBO</sub>	50	-	-	V
	BC338	V <sub>(BR)CBO</sub>	30	-	-	V
Collector Emitter Breakdown Voltage at I <sub>C</sub> = 2 mA	BC337	V <sub>(BR)CEO</sub>	45	-	-	V
	BC338	V <sub>(BR)CEO</sub>	25	-	-	V
Emitter Base Breakdown Voltage at I <sub>E</sub> = 100 μA	V <sub>(BR)EBO</sub>	5	-	-	V	
Collector Emitter Saturation Voltage at I <sub>C</sub> = 500 mA, I <sub>B</sub> = 50 mA	V <sub>CE(sat)</sub>	-	-	0.7	V	
Base Emitter On Voltage at V <sub>CE</sub> = 1 V, I <sub>C</sub> = 300 mA	V <sub>BE(on)</sub>	-	-	1.2	V	
Gain Bandwidth Product at V <sub>CE</sub> = 5 V, I <sub>C</sub> = 10 mA, f = 50 MHz	f <sub>T</sub>	-	100	-	MHz	
Collector Base Capacitance at V <sub>CB</sub> = 10 V, f = 1 MHz	C <sub>cbo</sub>	-	12	-	pF	





# FUKUCOM COMPANY LTD.

福靈有限公司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

## BC337...BC338

