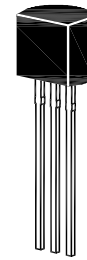


BC337...BC338

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.



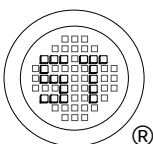
1. Collector 2. Base 3. Emitter
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	BC337	BC338	Unit
Collector Base Voltage	V_{CBO}	50	30	V
Collector Emitter Voltage	V_{CEO}	45	25	V
Emitter Base Voltage	V_{EBO}	5		V
Collector Current	I_{C}	800		mA
Peak Collector Current	I_{CM}	1		A
Total Power Dissipation	P_{tot}	625		mW
Junction Temperature	T_{J}	150		$^\circ\text{C}$
Storage Temperature Range	T_{S}	- 55 to + 150		$^\circ\text{C}$

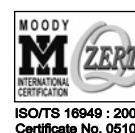
Characteristics at $T_a = 25^\circ\text{C}$

Parameter		Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V _{CE} = 1 V, I _C = 100 mA	Current Gain Group	-16	h _{FE}	100	-	250	-
		-25	h _{FE}	160	-	400	-
		-40	h _{FE}	250	-	630	-
at V _{CE} = 1 V, I _C = 300 mA		-16	h _{FE}	60	-	-	-
		-25	h _{FE}	100	-	-	-
		-40	h _{FE}	170	-	-	-
Collector Base Cutoff Current at V _{CB} = 50 V	BC337	I _{CBO}	-	-	100	nA	
at V _{CB} = 30 V	BC338		-	-	100		
Collector Base Breakdown Voltage at I _C = 100 μA	BC337 BC338	V _{(BR)CBO}	50 30	- -	- -	V	
Collector Emitter Breakdown Voltage at I _C = 2 mA	BC337 BC338	V _{(BR)CEO}	45 25	- -	- -	V	
Emitter Base Breakdown Voltage at I _E = 100 μA		V _{(BR)EBO}	5	-	-	V	
Collector Emitter Saturation Voltage at I _C = 500 mA, I _B = 50 mA		V _{CE(sat)}	-	-	0.7	V	
Base Emitter On Voltage at V _{CE} = 1 V, I _C = 300 mA		V _{BE(on)}	-	-	1.2	V	
Gain Bandwidth Product at V _{CE} = 5 V, I _C = 10 mA, f = 50 MHz		f _T	-	100	-	MHz	
Collector Base Capacitance at V _{CB} = 10 V, f = 1 MHz		C _{CBO}	-	12	-	pF	



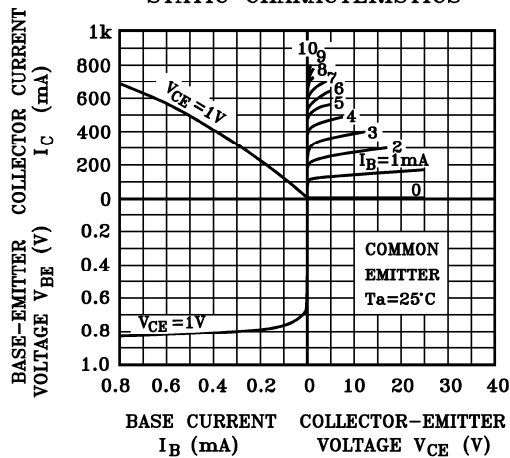
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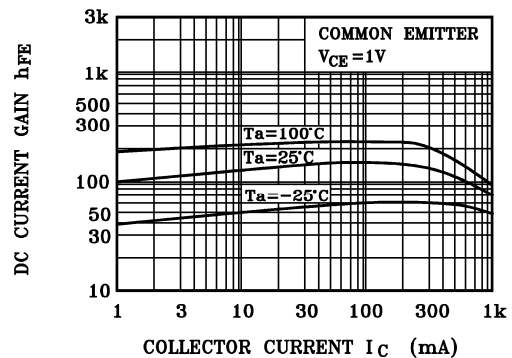


Dated : 27/12/2007

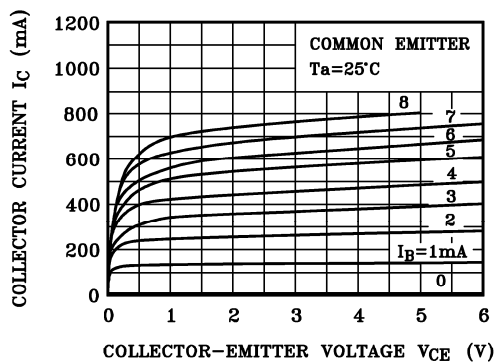
STATIC CHARACTERISTICS



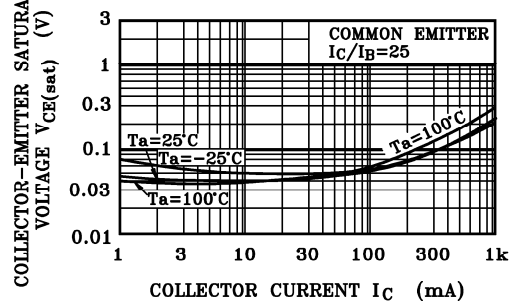
$h_{FE} - I_C$



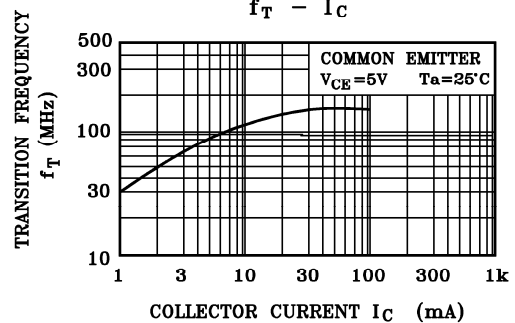
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



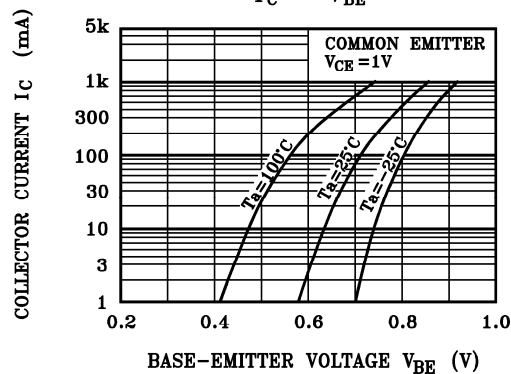
$V_{CE(sat)} - I_C$



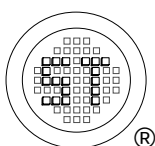
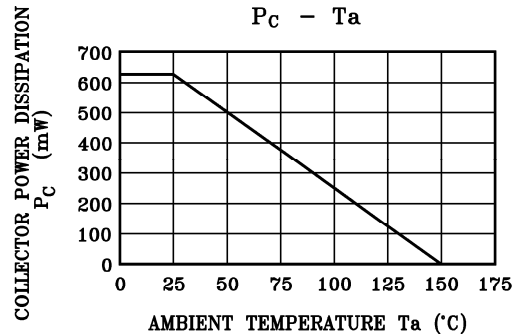
$f_T - I_C$



$I_C - V_{BE}$

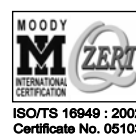


$P_C - T_a$



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098