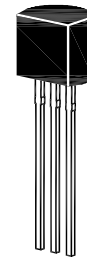


BC337...BC338

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.



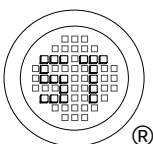
1. Collector 2. Base 3. Emitter
TO-92 Plastic Package

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		$^\circ\text{C}$

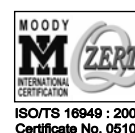
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{\text{CE}} = 1\text{ V}$, $I_{\text{C}} = 100\text{ mA}$	h_{FE}	100	-	250	-
Current Gain Group -16					
-25					
-40					
at $V_{\text{CE}} = 1\text{ V}$, $I_{\text{C}} = 300\text{ mA}$		60	-	-	-
-16					
-25					
-40		170	-	-	-
Collector Base Cutoff Current at $V_{\text{CB}} = 50\text{ V}$	I_{CBO}	-	-	100	nA
BC337		-	-	100	
at $V_{\text{CB}} = 30\text{ V}$	BC338	-	-	100	
Collector Base Breakdown Voltage at $I_{\text{C}} = 100\text{ }\mu\text{A}$	$V_{(\text{BR})\text{CBO}}$	50 30	- -	- -	V
Collector Emitter Breakdown Voltage at $I_{\text{C}} = 2\text{ mA}$	$V_{(\text{BR})\text{CEO}}$	45 25	- -	- -	V
Emitter Base Breakdown Voltage at $I_{\text{E}} = 100\text{ }\mu\text{A}$	$V_{(\text{BR})\text{EBO}}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_{\text{C}} = 500\text{ mA}$, $I_{\text{B}} = 50\text{ mA}$	$V_{\text{CE(sat)}}$	-	-	0.7	V
Base Emitter On Voltage at $V_{\text{CE}} = 1\text{ V}$, $I_{\text{C}} = 300\text{ mA}$	$V_{\text{BE(on)}}$	-	-	1.2	V
Gain Bandwidth Product at $V_{\text{CE}} = 5\text{ V}$, $I_{\text{C}} = 10\text{ mA}$, $f = 50\text{ MHz}$	f_{T}	-	100	-	MHz
Collector Base Capacitance at $V_{\text{CB}} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{CBO}	-	12	-	pF



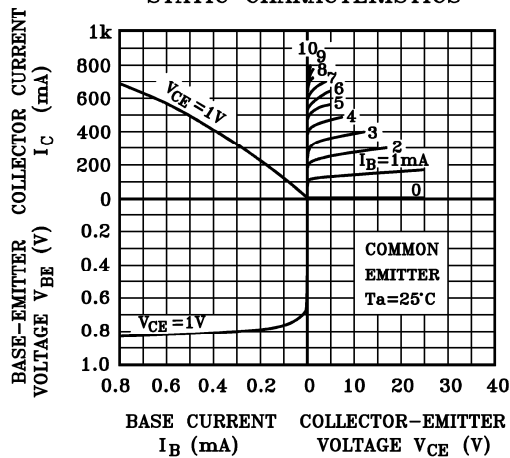
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listed on the Hong Kong Stock Exchange, Stock Code: 724)

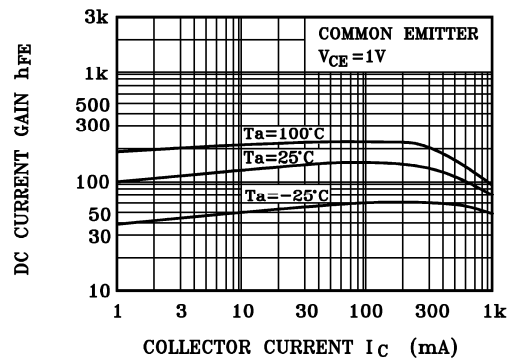


Dated : 27/12/2007

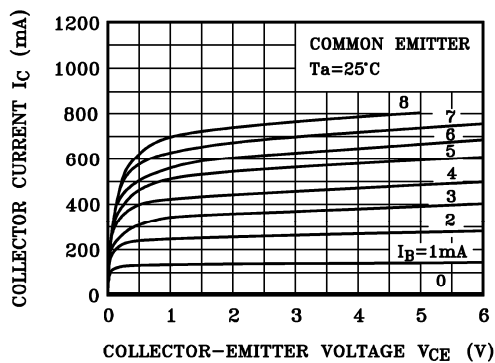
STATIC CHARACTERISTICS



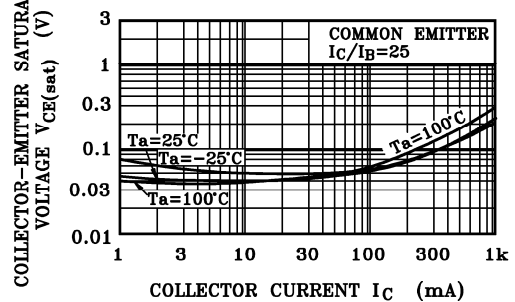
$h_{FE} - I_C$



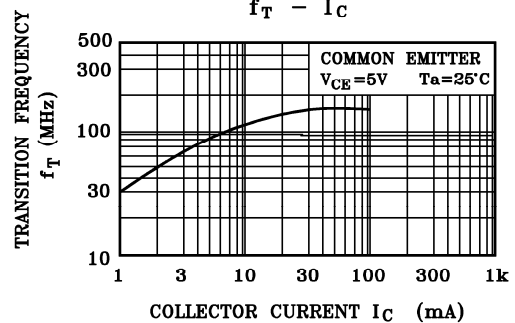
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



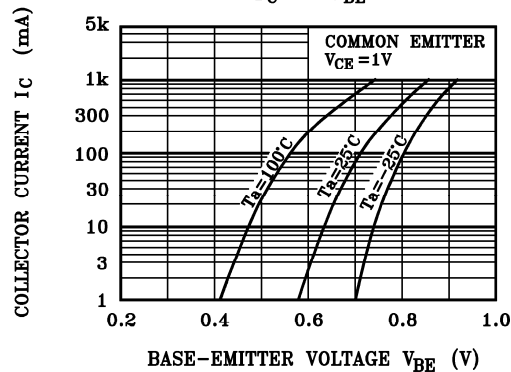
$V_{CE(sat)} - I_C$



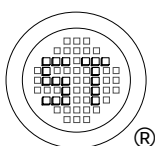
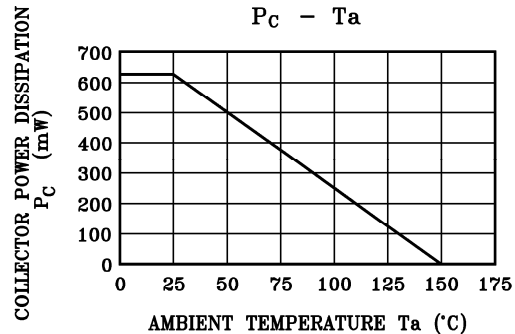
$f_T - I_C$



$I_C - V_{BE}$



$P_C - T_a$



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098