

Kingtronics®**BC337...BC338**NPN Silicon Epitaxial Planar
Transistor**FEATURES**

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 (Ta = 25°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		°C
Storage Temperature Range	T_{stg}	-55 to +150		°C

Characteristics at Ta = 25°C

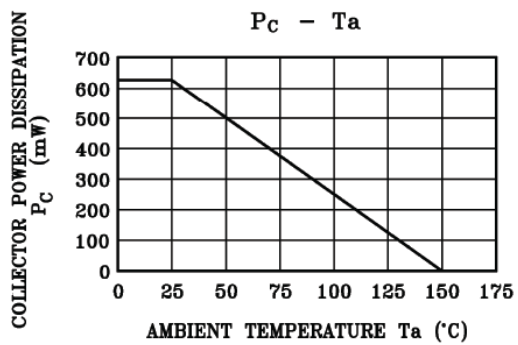
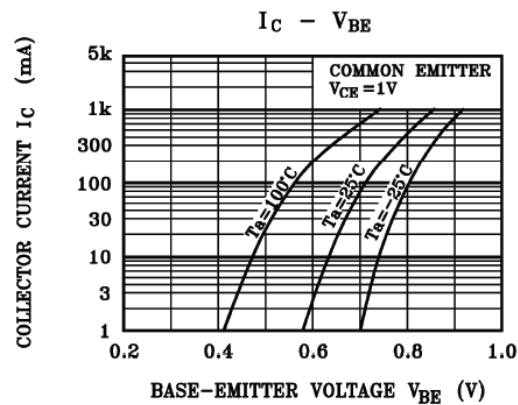
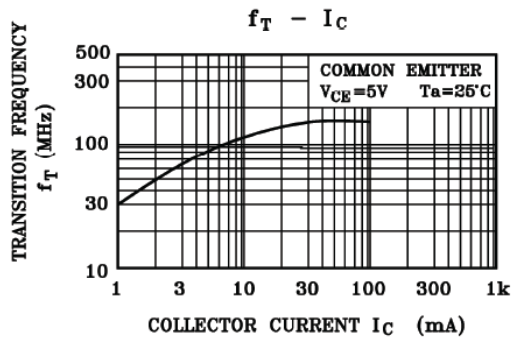
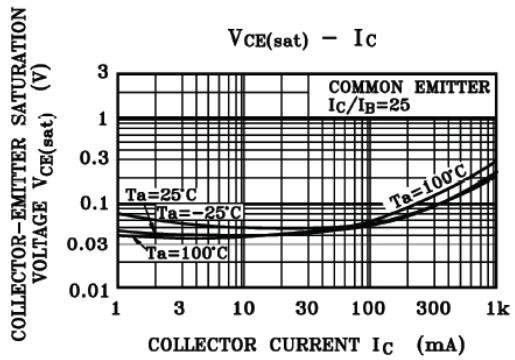
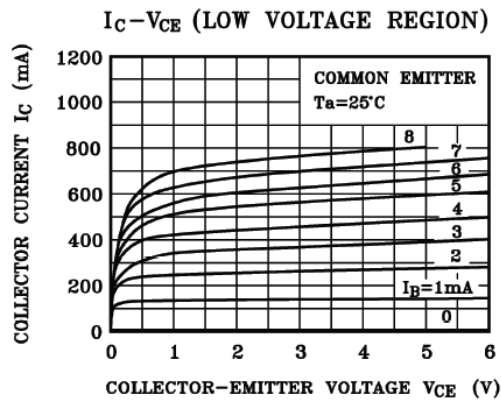
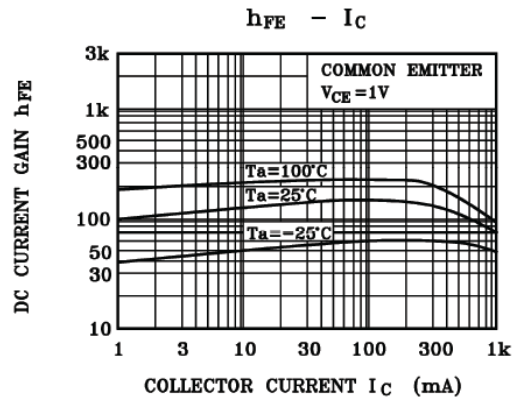
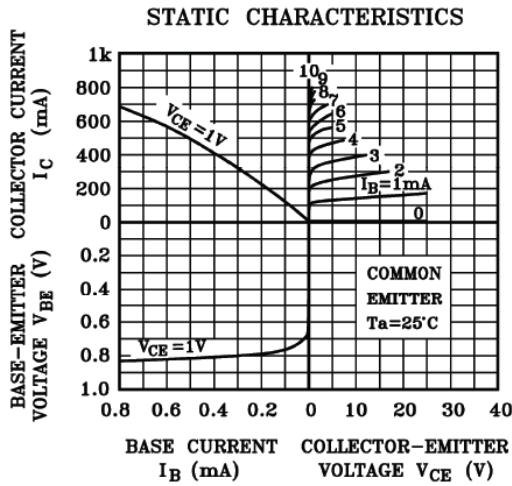
Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 1$ V, $I_C = 100$ mA Current Gain Group	-16	h_{FE}	100	-	250	-
	-25	h_{FE}	160	-	400	-
	-40	h_{FE}	250	-	630	-
		h_{FE}	60	-	-	-
Collector Base Cutoff Current at $V_{CB} = 50$ V at $V_{CB} = 30$ V	BC337	I_{CBO}	-	-	100	nA
	BC338		-	-	100	
Collector Base Breakdown Voltage at $I_C = 100$ μ A	BC337	$V_{(BR)CBO}$	50	-	-	V
	BC338		30	-	-	
Collector Emitter Breakdown Voltage at $I_C = 2$ mA	BC337	$V_{(BR)CEO}$	45	-	-	V
	BC338		25	-	-	
Emitter Base Breakdown Voltage at $I_E = 100$ μ A		$V_{(BR)EBO}$	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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