

Description

Silicon NPN transistor in a TO-92(R) Plastic Package.

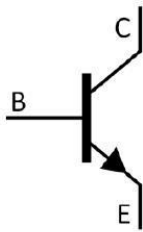
Features

- High current
- Complementary pair with BC327.

Applications

General purpose application and switching.

Symbol	Parameter	Max	Unit
V_{CE0}	collector-emitter voltage	45	V
I_C	collector current (DC)	800	mA

Equivalent Circuit & Pinning


PIN1 : Emitter

PIN 2 : Base

PIN 3 : Collector

hFE Classifications & Marking

h _{FE} Classifications Symbol	16	25	40
h _{FE} Range	100~250	160~400	250~600

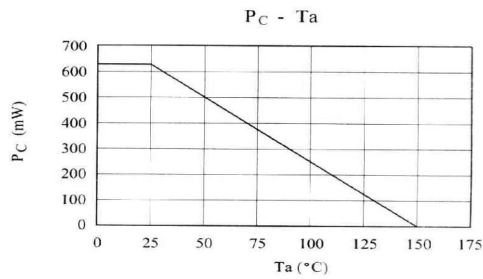
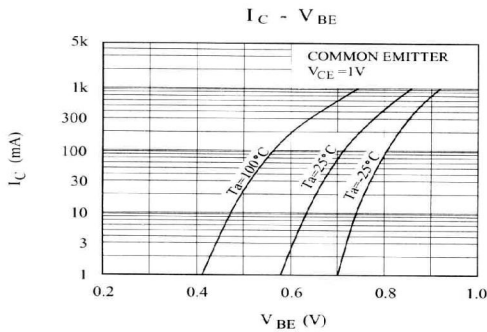
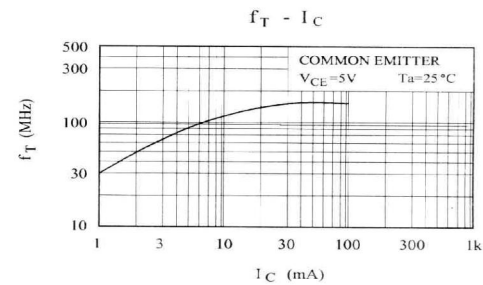
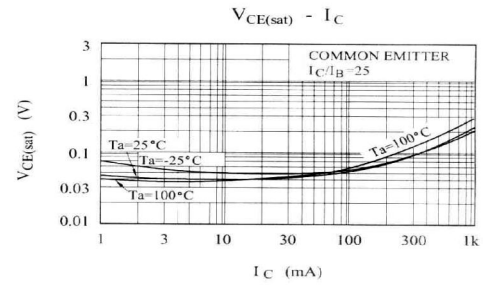
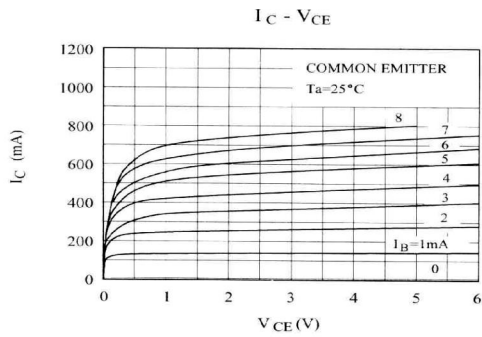
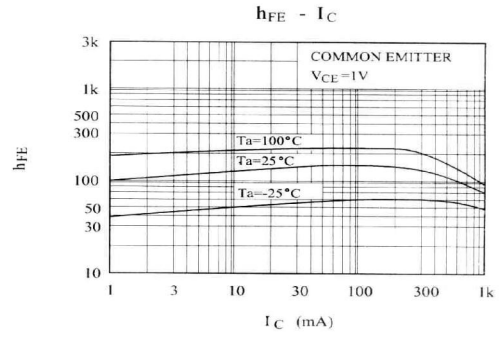
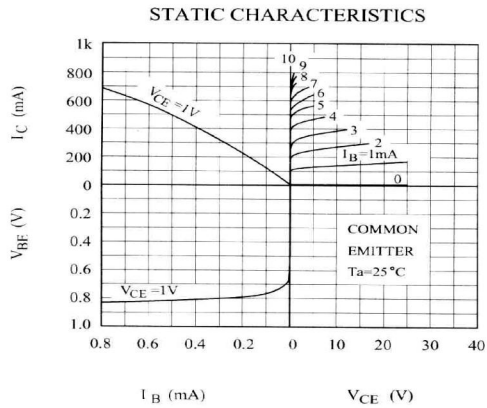
Absolute Maximum Ratings(Ta=25°C)

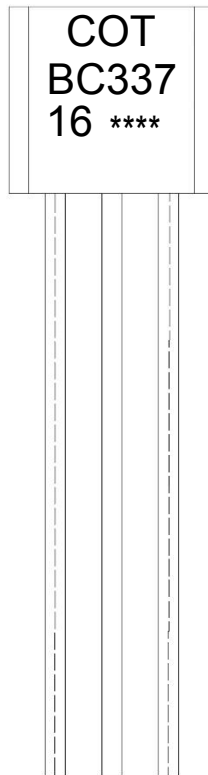
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	800	mA
Emitter Current - Continuous	I_E	800	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Electrical Characteristic (Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=45V$ $I_E=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=1.0V$ $I_C=100mA$	100		600	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			0.7	V
Base to Emitter On Voltage	V_{BE}	$V_{CE}=1.0V$ $I_C=300mA$			1.2	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=10mA$ $f=100MHz$		100		MHz
Collector output capacitance	C_c	$V_{CB}=10V$ $f=1.0MHz$		12		pF

Electrical Characteristic Curve



Marking Instructions


Note:

COT: Company Code.

BC337: Product Type.

16: hFE Classifications Symbol

****: Lot No. Code, code change with Lot No.

h _{FE} Classifications Symbol	16	25	40
h _{FE} Range	100~250	160~400	250~600

Packaging SPEC.
BULK

Package Type	Units					Dimension (unit: mm3)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

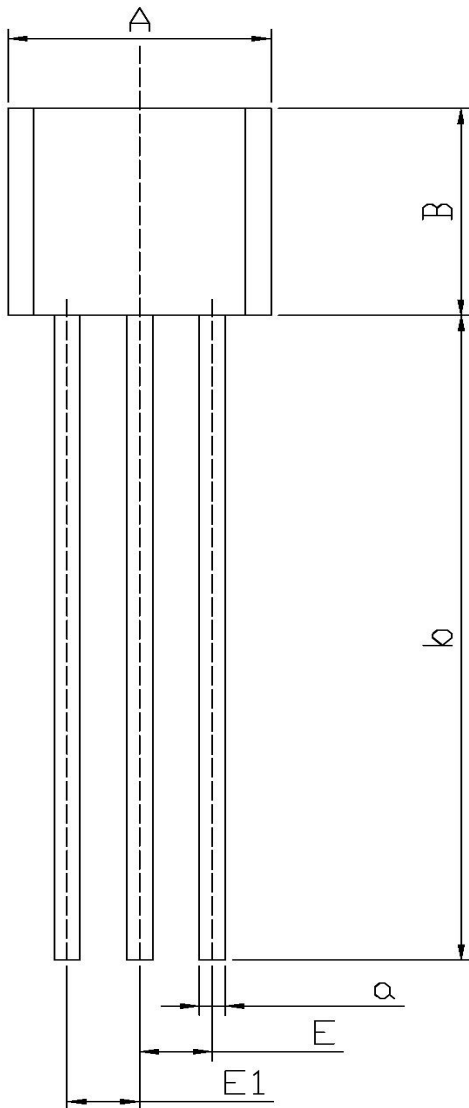
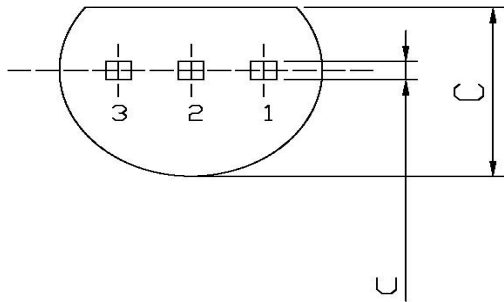
AMMO

Package Type	Units					Dimension (unit: mm3)	
	Units/tape	Tape/Inner Box	Rows/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Inner Box	Outer Box
TO-92	3,000	1	120	10	30,000	328×230×42	480×346×235, 547×407×268

Package Outline Dimensions

TO-92(R)

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	4.4	4.8
B	4.3	4.7
b	13	15
a	0.40	0.60
E	1.22	1.32
E1	1.22	1.32
C	3.4	3.8
c	0.30	0.50