

Description

- Medium power amplifier
- Large collector current : $I_{CMax.} = 700mA$
- Low collector saturation voltage enabling low-voltage operation

Features

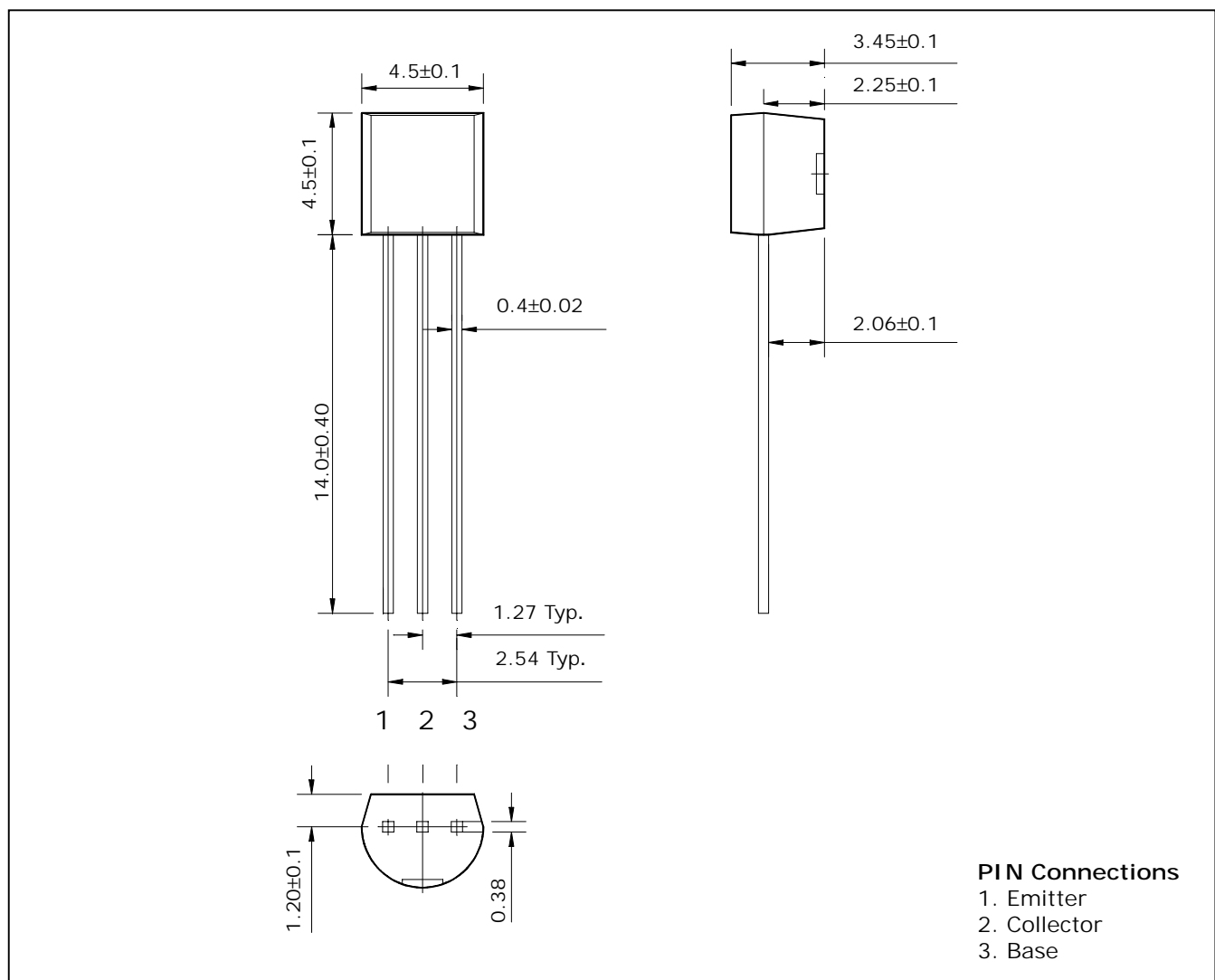
- Center collector pin type
- Complementary pair with 8550S

Ordering Information

Type NO.	Marking	Package Code
8050S	8050S	TO-92

Outline Dimensions

unit : mm



Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	30	V
Collector-Emitter voltage	V_{CEO}	25	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_C	700	mA
Collector dissipation	P_C	625	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV_{CBO}	$I_C=10\mu A, I_E=0$	30	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	$I_C=1mA, I_B=0$	25	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	$I_E=10\mu A, I_C=0$	5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=20V, I_E=0$	-	-	1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$	-	-	0.1	μA
DC current gain	h_{FE}^*	$V_{CE}=1V, I_C=50mA$	100	-	700	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	0.5	V

* : h_{FE} rank / C : 100 ~ 180, D : 160 ~ 300(200~350 : $V_{CE}=1V, I_C=5mA$), E: 280~700

Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

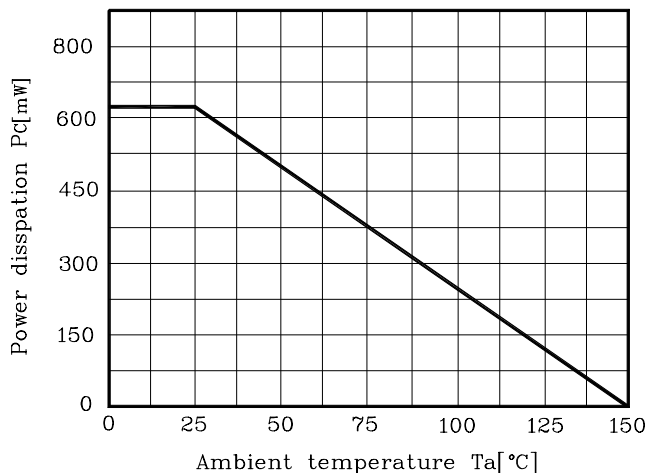


Fig. 2 $I_C - V_{BE}$

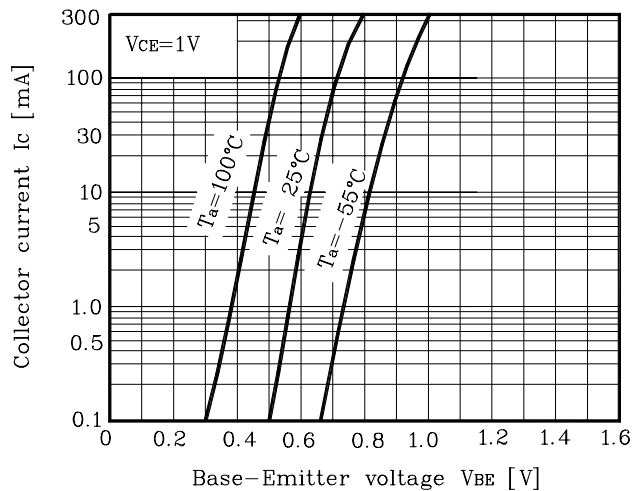


Fig. 3 $I_C - V_{CE}$

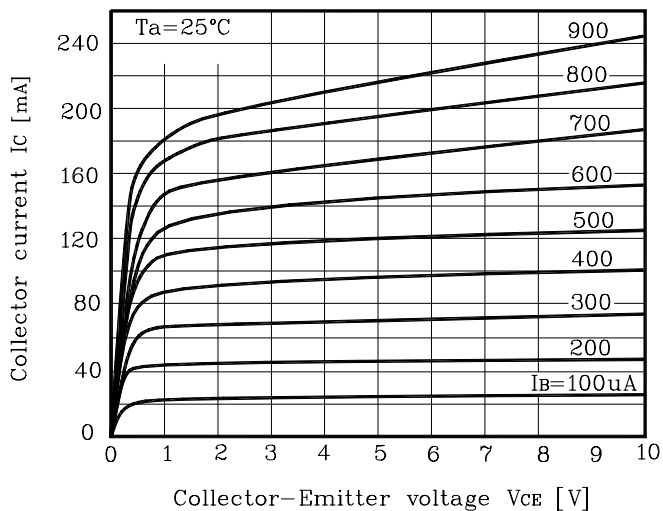


Fig. 4 $V_{CE(sat)} - I_C$

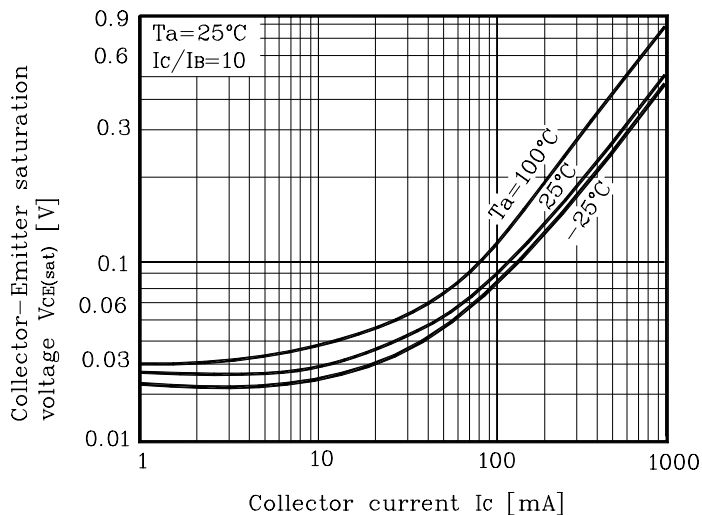


Fig. 5 $h_{FE} - I_C$

