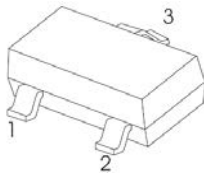
SOT-23 Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



FEATURES

- Suitable for driver stage of small motor
- Small package

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	–15	V
Collector-emitter voltage	V_{CEO}	–15	V
Emitter-base voltage	V_{EBO}	–5	V
Collector current	I_C	–800	mA
Base current	I_B	–160	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	–55 to 150	°C

Electrical Characteristics (Ta = 25°C)

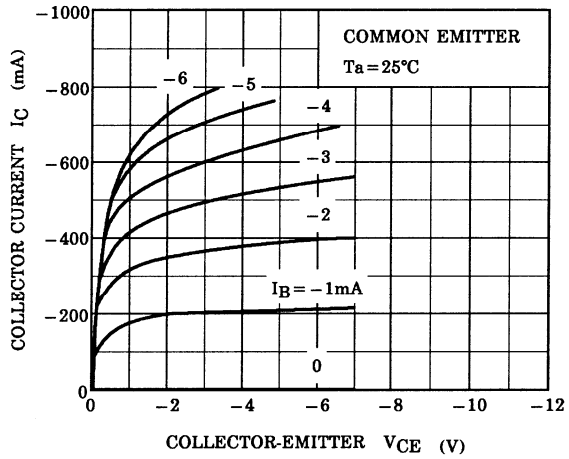
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	V_{CB} = –15 V, I_E = 0	—	—	–100	nA
Emitter cut-off current	I_{EBO}	V_{EB} = –5 V, I_C = 0	—	—	–100	nA
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = –10 mA, I_B = 0	–15	—	—	V
DC current gain	$h_{FE(1)}$	V_{CE} = –1 V, I_C = –100 mA	120	—	400	
	$h_{FE(2)}$	V_{CE} = –1 V, I_C = –800 mA	40	—	—	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = –400 mA, I_B = –8 mA	—	—	–0.2	V
Base-emitter voltage	V_{BE}	V_{CE} = –1 V, I_C = –10 mA	–0.5	—	–0.8	V
Transition frequency	f_T	V_{CE} = –5 V, I_C = –10 mA	—	120	—	MHz
Collector output capacitance	C_{ob}	V_{CB} = –10 V, I_E = 0, f = 1 MHz	—	13	—	pF

Classification of hfe

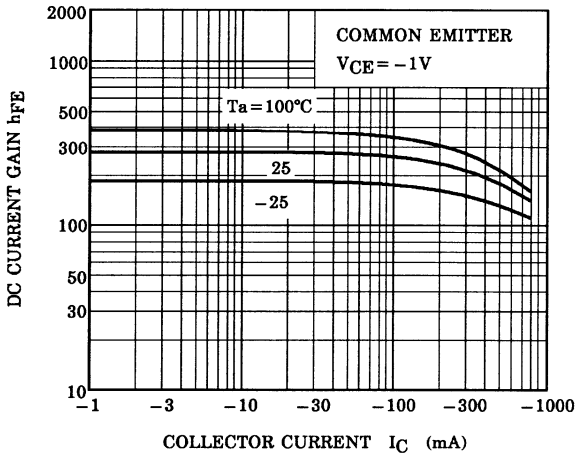
Type	2SA1362-Y	2SA1362-G
Range	120-240	200-400
Marking	AEY	AEG

Typical Characteristics

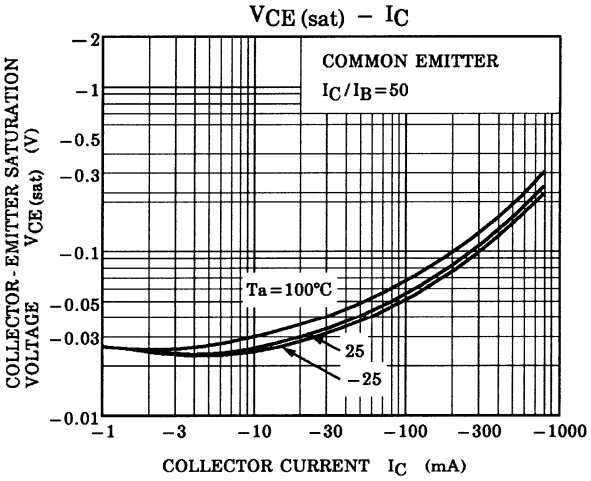
I_C – V_{CE}



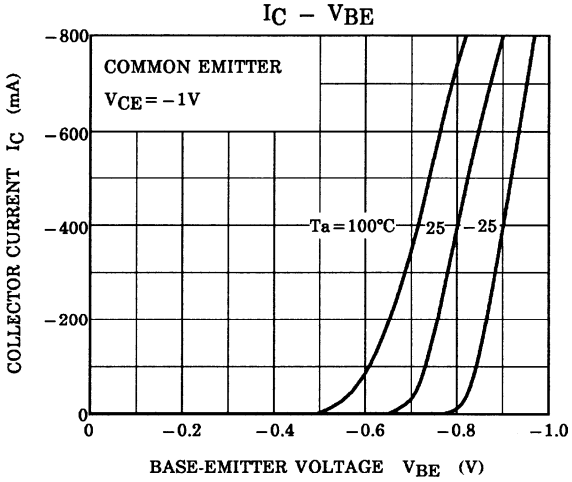
h_{FE} – I_C



$V_{CE\,(sat)}$ – I_C



I_C – V_{BE}



P_C – Ta