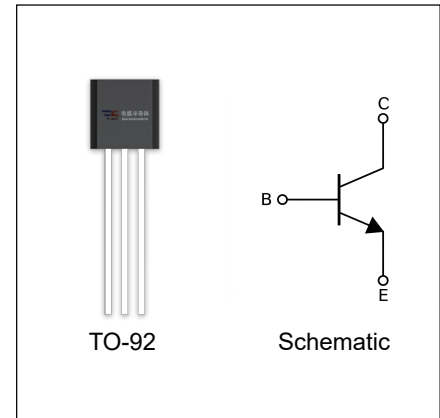


8050S TRANSISTOR (NPN)

FEATURES

- Complimentary to 8550S
- Collector Current: $I_C=0.5A$



MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	0.5	A
P_C	Collector Power Dissipation	0.625	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55-150	$^{\circ}C$

T_a=25 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100μA, I _E =0	40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 0.1mA, I _B =0	25			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} = 40 V, I _E =0			0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} = 20 V, I _B =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} = 1V, I _C = 50mA	85		400	
	h _{FE(2)}	V _{CE} = 1V, I _C = 500mA	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500mA, I _B =50mA			0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =500mA, I _B =50mA			1.2	V
Transition frequency	f _T	V _{CE} = 6V, I _C =20mA f =30MHz	150			MHz

CLASSIFICATION OF h_{FE(1)}

Rank	B	C	D	D3
Range	85-160	120-200	160-300	300-400

Static Characteristic
