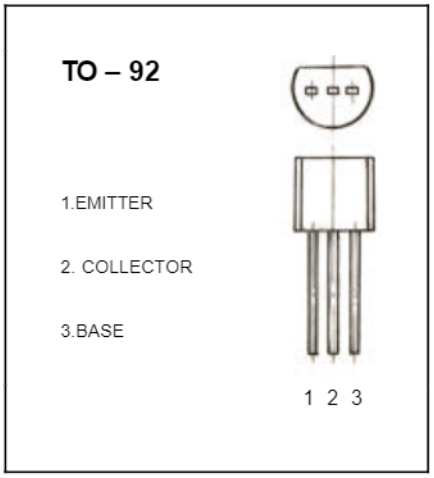
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

8050S TRANSISTOR (NPN)



FEATURES

Power dissipation

P_{CM} : 0.625 W (Tamb=25℃)

Collector current

I_{CM} : 0.5 A

Collector-base voltage

$V_{(BR)CBO}$: 40 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	I_C= 100 μA , I_E=0	40			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	I_C= 1 mA, I_B=0	25			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 100 μA, 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}= 3 V, I_C=0			0.1	μA
DC current gain	$h_{FE\ (1)}$	V_{CE}= 1 V, I_C= 50mA	85		300	
	$h_{FE\ (2)}$	V_{CE}= 1 V, I_C= 500mA	50			
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=500mA, I_B=50 mA			0.6	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=500mA, I_B=50 mA			1.2	V
Transition frequency	f_T	V_{CE}= 6 V, IC=20mA f =30MHz	150			MHz

CLASSIFICATION OF $h_{FE(1)}$

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