

FEATURES

Complimentary to S8550

MARKING: J3Y

**S8050 (NPN)**



MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CBO</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current -Continuous	I <sub>C</sub>	0.5	A
Collector Power Dissipation	P <sub>C</sub>	0.3	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	VCBO	IC= 100μA, IE=0	40			V
Collector-emitter breakdown voltage	VCEO	IC=1mA, IB=0	25			V
Emitter-base breakdown voltage	VEBO	IE=100μA, IC=0	5			V
Collector cut-off current	ICBO	VCB=40 V, IE=0			0.1	μA
Collector cut-off current	ICEO	VCB=20V, IE=0			0.1	μA
Emitter cut-off current	IEBO	VEB= 5V, IC=0			0.1	μA
DC current gain	HFE(1)	VCE=1V, IC= 50mA	120		350	
	HFE(2)	VCE=1V, IC= 500mA	50			
Collector-emitter saturation voltage	VCE(sat)	IC=500 mA, IB= 50mA			0.6	V
Base-emitter saturation voltage	VBE(sat)	IC=500 mA, IB= 50mA			1.2	V
Transition frequency	f <sub>T</sub>	VCE=6V, IC= 20mA f=30MHz	150			MHz

CLASSIFICATION OF h<sub>FE</sub>

Rank	L	H	
Range	120-200	200-350	

**S8050** Typical Characteristics

