



## SOT-23 Plastic-Encapsulate Transistors

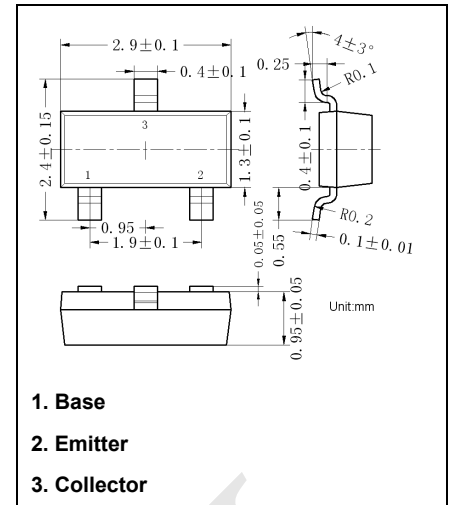
### S8050

NPN Transistors

#### Features

- Complimentary to S8550
- Collector Current:  $I_c = 0.8A$

Marking: J3Y



#### 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	800	mA
$P_c$	Collector Power Dissipation	300	mW
$T_j$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55 ~ +150	$^{\circ}C$

#### Electrical Characteristics ( $T_a=25^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_c = 100\mu A, I_E = 0$	40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_c = 1mA, I_B = 0$	25			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = 100\mu A, I_c = 0$	5			V
$I_{cBO}$	Collector cut-off current	$V_{CB} = 40V, I_E = 0$			100	nA
$I_{cEO}$	Collector cut-off current	$V_{CE} = 20V, I_B = 0$			100	nA
$I_{EBO}$	Emitter cut-off current	$V_{EB} = 5V, I_c = 0$			100	nA
$h_{FE(1)}$	DC current gain	$V_{CE} = 1V, I_c = 50mA$	160		320	
$h_{FE(2)}$		$V_{CE} = 1V, I_c = 500mA$	50			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_c = 500mA, I_B = 50mA$			0.6	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_c = 500mA, I_B = 50mA$			1.2	V
$f_t$	Transition frequency	$V_{CE} = 6V, I_c = 20mA, f = 30MHz$	150			MHz

# Typical Characteristics

