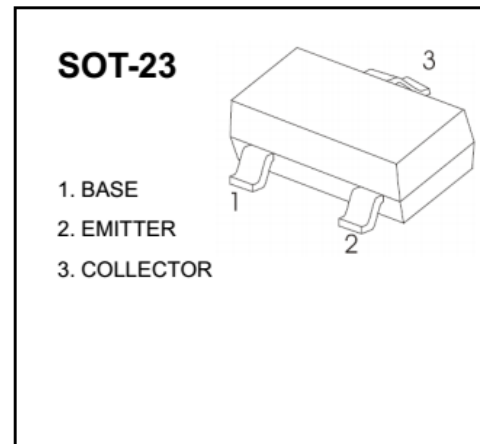


**isc Silicon NPN Power Transistor****SS8050****DESCRIPTION**

- Low Saturation Voltage-  
:  $V_{CE(sat)} = 0.5V(\text{Max}) @ I_C = 0.8A$

**APPLICATIONS**

- Designed for high-speed switching and Amplifier applications.

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )**

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	1.5	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	300	mW
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$

**isc Silicon NPN Power Transistor****SS8050****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu\text{A}$ , $I_E=0$	40		V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=0.1\text{mA}$ , $I_B=0$	25		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu\text{A}$ , $I_C=0$	5		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=800\text{mA}$ ; $I_B=80\text{mA}$		0.5	V
$V_{BE(sat)}$	base-emitter saturation voltage	$I_C=800\text{mA}$ ; $I_B=80\text{mA}$		1.2	V
$I_{CBO}$	collector cut-off current	$V_{CB}=40\text{V}$ , $I_E=0$		0.1	$\mu\text{A}$
$I_{CEO}$	collector cut-off current	$V_{CE}=20\text{V}$ , $I_B=0$		0.1	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}$ ; $I_C=0$		0.1	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C=0.1\text{A}$ ; $V_{CE}=1\text{V}$	120	400	
$h_{FE-2}$	DC Current Gain	$I_C=0.8\text{A}$ ; $V_{CE}=1\text{V}$	40		
$f_T$	Transition frequency	$V_{CE}=10\text{V}$ , $I_C=50\text{mA}$ , $f=30\text{MHz}$	100		MHz

**Classification of  $h_{FE-1}$** 

Rank	L	H	J
Range	120-200	200-350	300-400