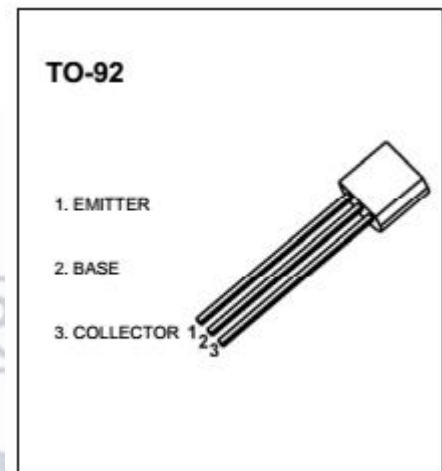


isc Silicon NPN Power Transistor**SS8050****DESCRIPTION**

- 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 @ $T_C=25^\circ\text{C}$	2	W
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
$V_{BE(on)}$	base-emitter voltage	$I_C=10\text{mA}$; $V_{CE}=1\text{V}$		1.0	V
I_{CBO}	collector cut-off current	$V_{CB}=40\text{V}$, $I_E=0$		0.1	μA
I_{CEO}	collector cut-off current	$V_{CE}=20\text{V}$, $I_B=0$		0.1	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}$; $I_C=0$		0.1	μA
h_{FE-1}	DC Current Gain	$I_C=0.1\text{A}$; $V_{CE}=1\text{V}$	85	400	
h_{FE-2}	DC Current Gain	$I_C=0.8\text{A}$; $V_{CE}=1\text{V}$	40		

Classification of h_{FE1}

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