

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

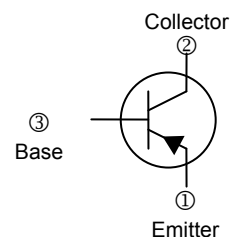
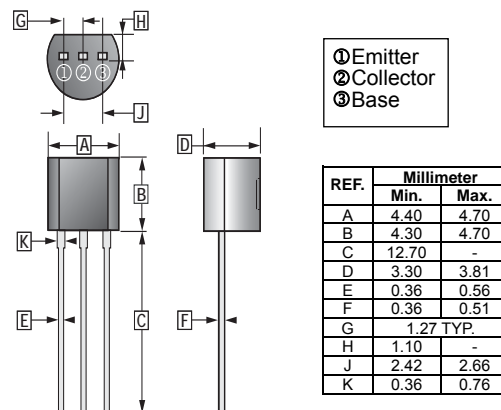
## FEATURES

TO-92

- General Purpose Switching and Amplification.

## CLASSIFICATION OF $h_{FE}$ (1)

Product-Rank	8550SST-B	8550SST-C	8550SST-D
Range	85~160	120~200	160~300



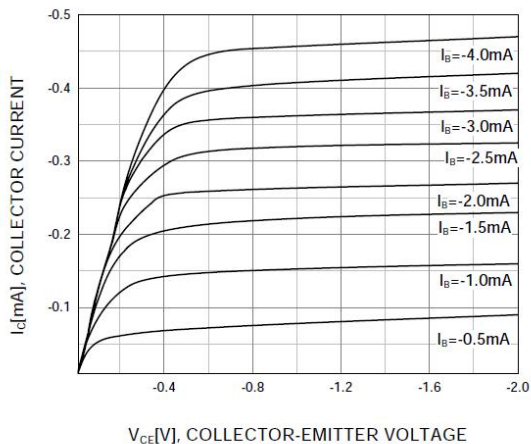
## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-40	V
Collector to Emitter Voltage	$V_{CEO}$	-25	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current - Continuous	$I_C$	-1.5	A
Collector Power Dissipation	$P_C$	1	W
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	125	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

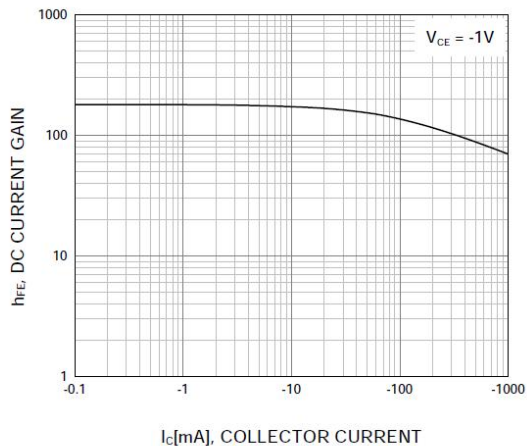
## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-40	-	-	V	$I_C = -0.1\text{mA}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-25	-	-	V	$I_C = -0.1\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -0.1\text{mA}, I_C = 0$
Collector Cut-Off Current	$I_{CBO}$	-	-	-0.1	$\mu\text{A}$	$V_{CB} = -40\text{V}, I_E = 0$
Collector Cut-Off Current	$I_{CEO}$	-	-	-0.1	$\mu\text{A}$	$V_{CE} = -20\text{V}, I_B = 0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	-0.1	$\mu\text{A}$	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain	$h_{FE(1)}$	85	-	300		$V_{CE} = -1\text{V}, I_C = -100\text{mA}$
	$h_{FE(2)}$	40	-	-		$V_{CE} = -1\text{V}, I_C = -800\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -800\text{mA}, I_B = -80\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1.2	V	$I_C = -800\text{mA}, I_B = -80\text{mA}$
Transition Frequency	$f_T$	100	-	-	MHZ	$V_{CE} = -10\text{V}, I_C = -50\text{mA}, f = 30\text{MHZ}$

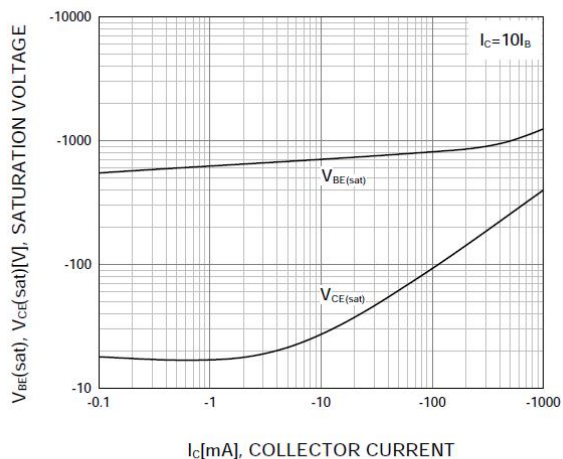
**RATINGS AND CHARACTERISTIC CURVES**



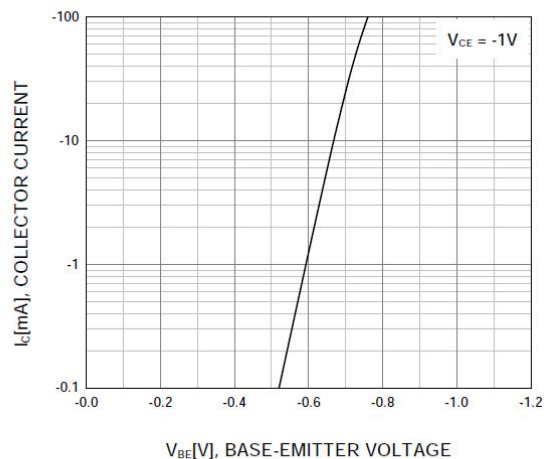
**Figure 1. Static Characteristic**



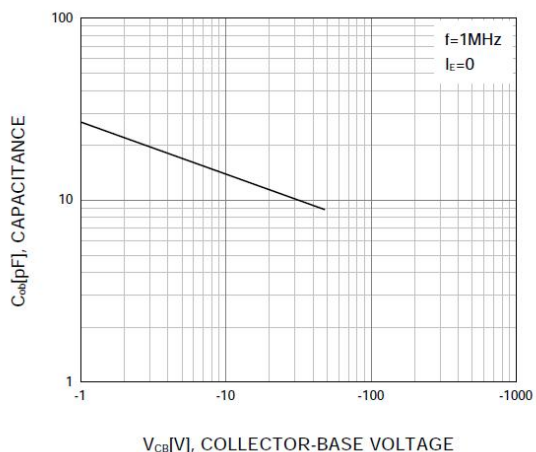
**Figure 2. DC current Gain**



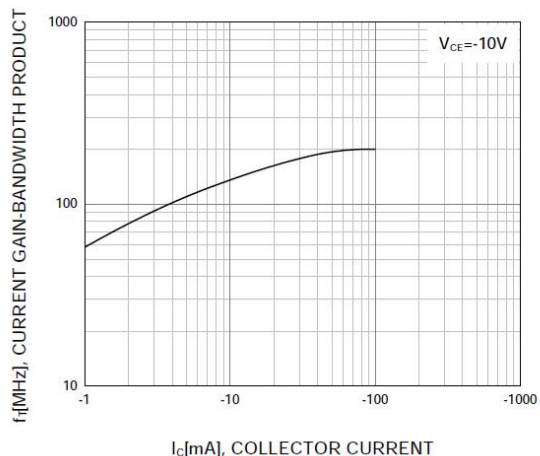
**Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



**Figure 4. Base-Emitter On Voltage**



**Figure 5. Collector Output Capacitance**



**Figure 6. Current Gain Bandwidth Product**