

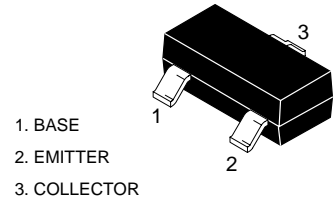
## Simplified outline

## FF8550HQLG TRANSISTOR ( PNP)

### SOT-23

### Features

- Complimentary to F8050HQLG
- High Collector Current



### Maximum Ratings( $T_a=25^{\circ}\text{C}$ 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	-1.5	A
$P_C$	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	417	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^{\circ}\text{C}$

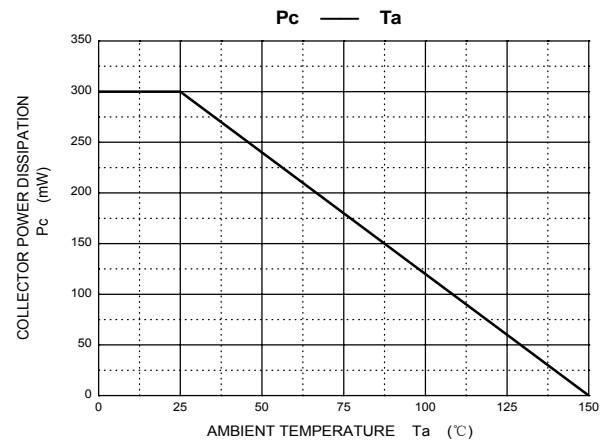
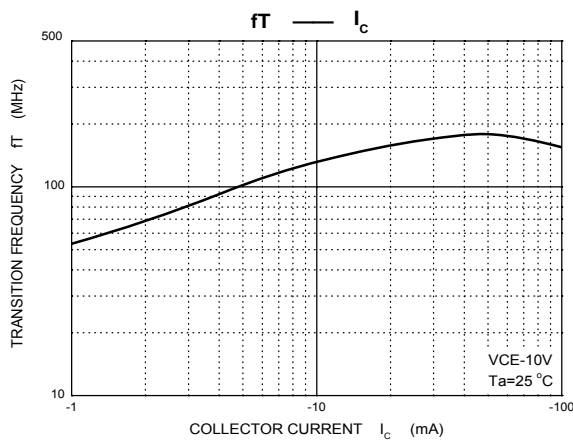
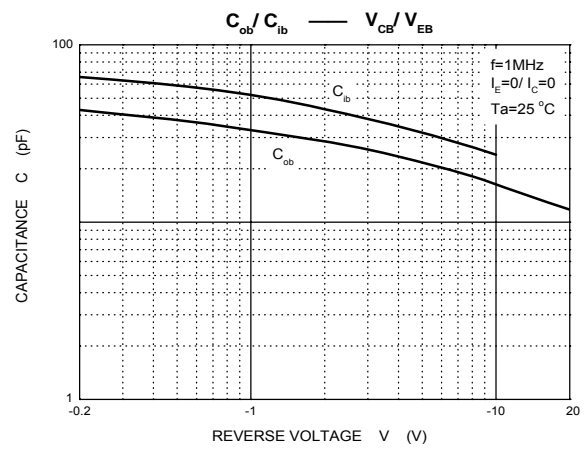
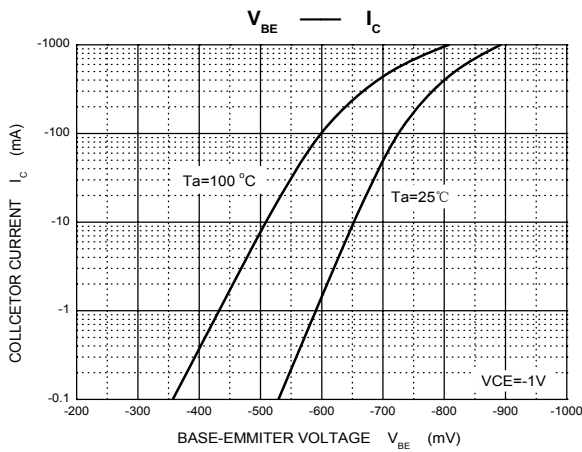
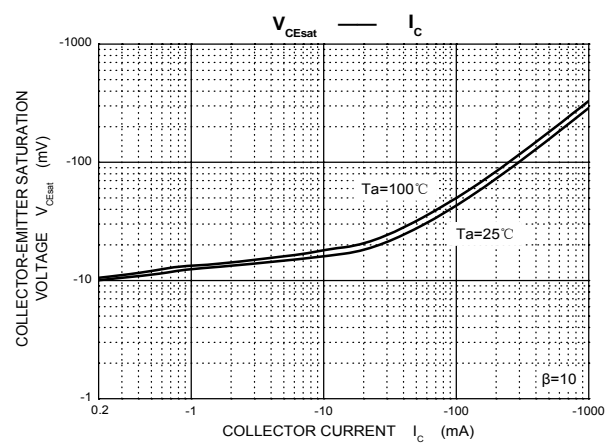
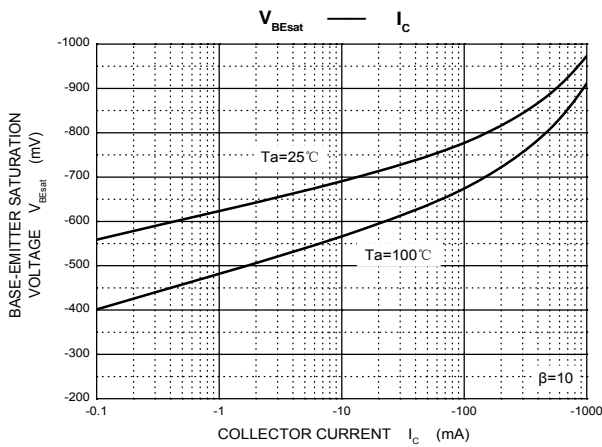
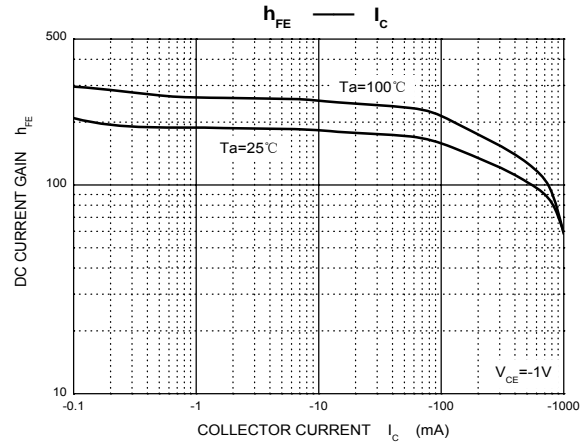
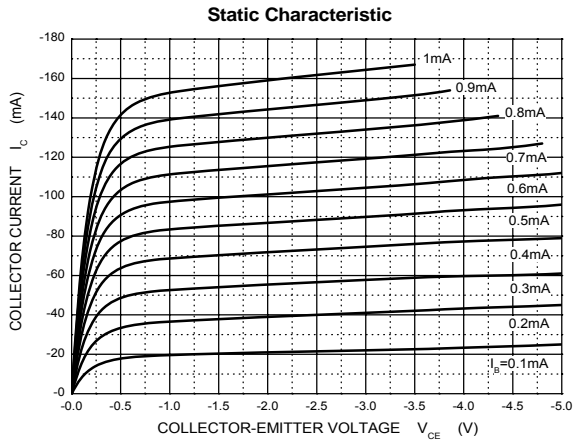
### Electrical Characteristics ( $T_{amb}=25$ unless otherwise specified )

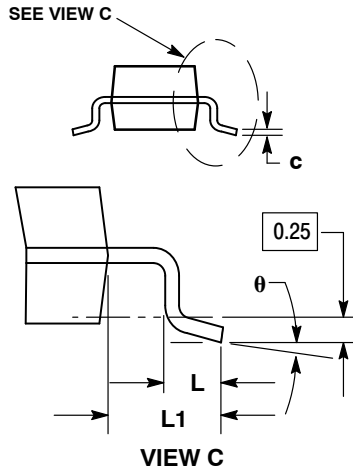
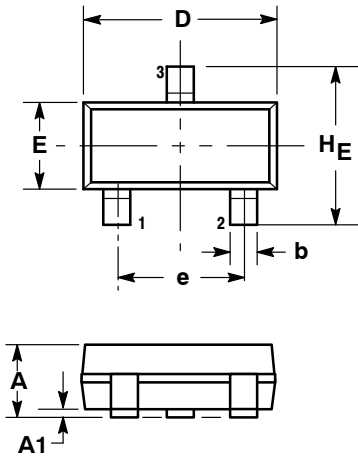
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-0.1\text{mA}, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-40\text{V}, I_E=0$			-100	nA
Collector cut-off current	$I_{CEO}$	$V_{CE}=-20\text{V}, I_B=0$			-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$	120		400	
	$h_{FE(2)}$	$V_{CE}=-1\text{V}, I_C=-800\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-800\text{mA}, I_B=-80\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-800\text{mA}, I_B=-80\text{mA}$			-1.2	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=-1\text{V}, I_C=-10\text{mA}$			-1	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=-50\text{mA}, f=30\text{MHz}$	100			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$			20	pF

### Classification Of $h_{FE(1)}$

RANK	L	H	J
RANGE	120 - 200	200 - 350	300 - 400

## Typical Characteristics



**Package Dimensions**
**SOT-23**


- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
  2. CONTROLLING DIMENSION: INCH.
  3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
  4. 318-01 THRU -07 AND -09 OBSOLETE, NEW STANDARD 318-08.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.10	0.20	0.30	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.40	2.64	0.083	0.094	0.104

- STYLE 6:  
 PIN 1. BASE  
 2. EMITTER  
 3. COLLECTOR

**SOLDERING FOOTPRINT\***
