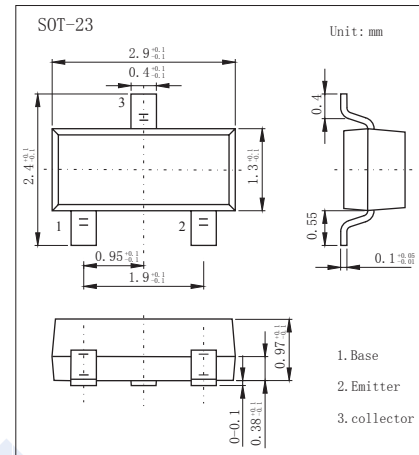


## NPN Transistors

## 2SC2734-HF

## ■ Features

- Collector Current Capability  $I_c=50\text{mA}$
- Collector Emitter Voltage  $V_{CE0}=11\text{V}$
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	20	V
Collector - Emitter Voltage	$V_{CE0}$	11	
Emitter - Base Voltage	$V_{EB0}$	3	
Collector Current - Continuous	$I_c$	50	mA
Collector Power Dissipation	$P_c$	150	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to 150	

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c = 100 \mu\text{A}, I_E = 0$	20			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_c = 1 \text{ mA}, R_{BE} = \infty$	11			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = 100 \mu\text{A}, I_c = 0$	3			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = 20 \text{ V}, I_E = 0$			0.5	$\mu\text{A}$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = 3 \text{ V}, I_c = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 10 \text{ mA}, I_B = 5 \text{ mA}$			0.7	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = 10 \text{ mA}, I_B = 5 \text{ mA}$			1.2	
DC current gain	$h_{FE}$	$V_{CE} = 10 \text{ V}, I_c = 5 \text{ mA}$	20		200	
Conversion gain	CG	$V_{CC} = 6 \text{ V}, I_c = 2 \text{ mA}, f = 900 \text{ MHz}, f_{osc} = 930 \text{ MHz (0dBm)}, f_{out} = 30 \text{ MHz}$		15		dB
Noise figure	NF	$V_{CC} = 6 \text{ V}, I_c = 2 \text{ mA}, f = 900 \text{ MHz}, f_{osc} = 930 \text{ MHz (0dBm)}, f_{out} = 30 \text{ MHz}$		9		
Oscillating output voltage	$V_{osc}$	$V_{CC} = 6 \text{ V}, I_c = 5 \text{ mA}, f = 930 \text{ MHz}$		140		mV
Collector output capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$			1.5	pF
Transition frequency	$f_T$	$V_{CE} = 10 \text{ V}, I_c = 10 \text{ mA}$	1.4	3.5		GHz

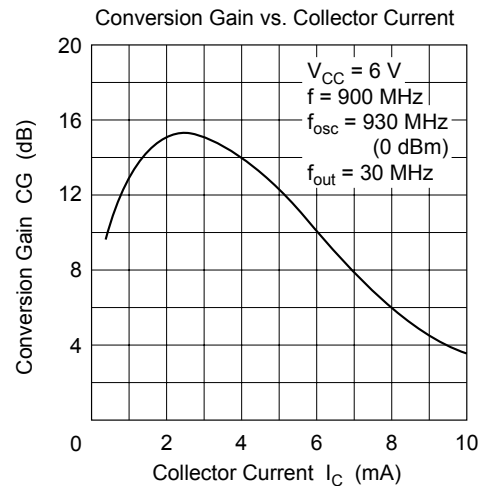
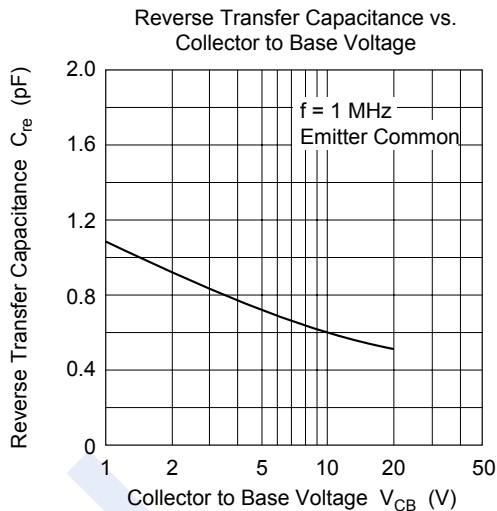
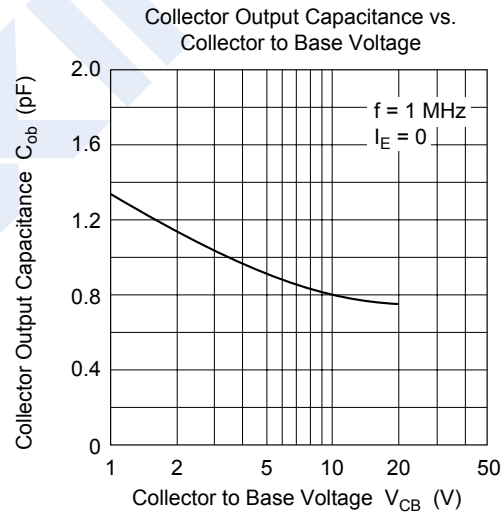
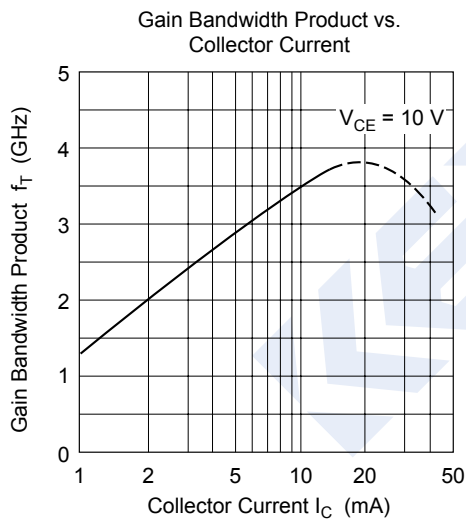
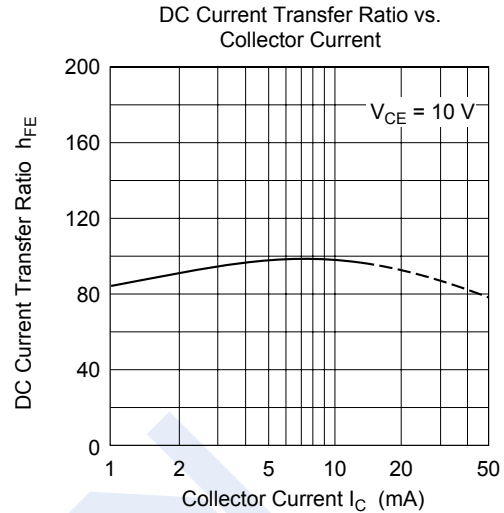
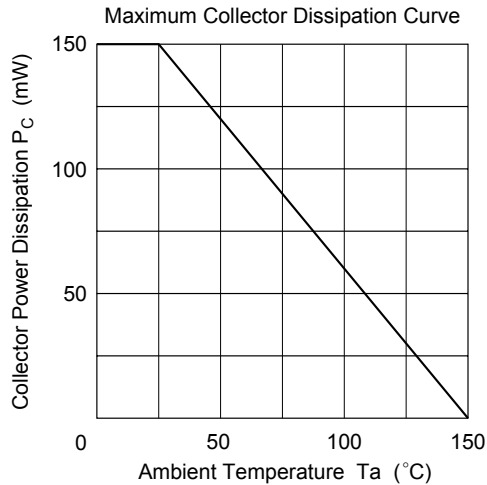
■ Classification of  $h_{fe}$ 

Type	2SC2734-GC-HF	2SC2734-R25-HF
Range	20-200	100-200
Marking	GC <sub>F</sub>	R25 <sub>F</sub>

## NPN Transistors

## 2SC2734-HF

## ■ Typical Characteristics



## NPN Transistors

## 2SC2734-HF

## ■ Typical Characteristics

