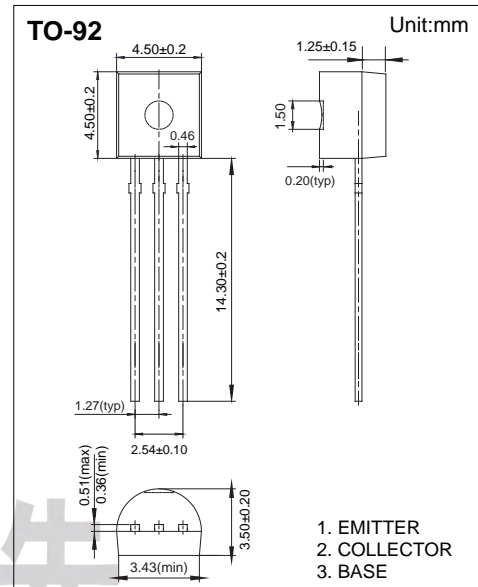


## PNP Transistors 2SA1015

### ■ Features

- Power dissipation:  $P_C=0.45W$
- Collector current:  $I_C=0.15A$



### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	-50	V
Collector - Emitter Voltage	$V_{CEO}$	-50	
Emitter - Base Voltage	$V_{EBO}$	-5	
Collector Current - Continuous	$I_C$	-150	mA
Collector Power Dissipation	$P_C$	400	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	312	$^\circ C/W$
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to 150	

# Transistor

## PNP Transistors 2SA1015

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = -100 \mu\text{A}, I_E = 0$	-50			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -0.1 \text{mA}, I_B = 0$	-50			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector cut-off current	$I_{CBO}$	$V_{CB} = -50 \text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -50\text{V}, I_B = 0$			-0.1	
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 \text{mA}, I_B = -10\text{mA}$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 \text{mA}, I_B = -10\text{mA}$			-1.1	
DC current gain	$h_{FE}$	$V_{CE} = -6\text{V}, I_C = -2\text{mA}$	70		700	
Noise figure	NF	$V_{CE} = -6 \text{V}, I_C = -0.1\text{mA}, f = 1\text{kHz}, R_G = 10\text{k}\Omega$			6	dB
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$			7	pF
Transition frequency	$f_T$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$	150			MHz

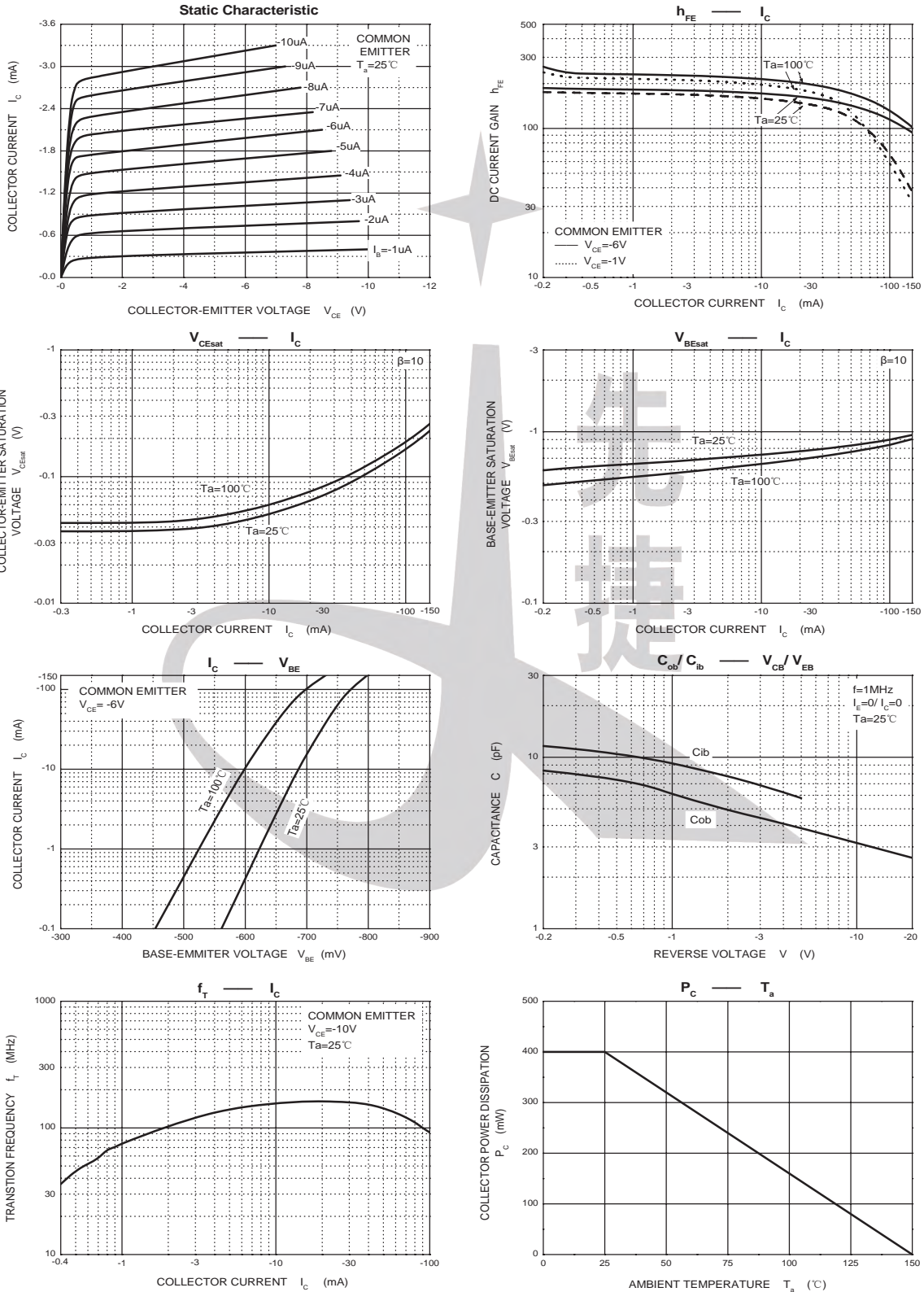
### ■ Classification of $h_{FE}$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

# Transistor

## PNP Transistors 2SA1015

### Typical Characteristics



# Transistor

## PNP Transistors 2SA1015

### Typical Characteristics

