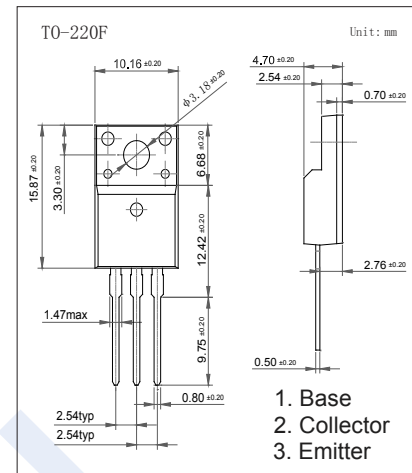


## PNP Transistors

### KTA1659

#### ■ Features

- High Transition Frequency
- Complementary to KTC4370



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-160	V
Collector - Emitter Voltage	$V_{CE0}$	-160	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-1.5	A
Base Current	$I_B$	-0.15	
Collector Power Dissipation $T_C = 25^\circ\text{C}$	$P_C$	20	W
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	$V_{CB0}$	$I_C = -100 \mu\text{A}, I_E = 0$	-160			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -10 \text{ mA}, I_B = 0$	-160			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	$I_{CB0}$	$V_{CB} = -160\text{V}, I_E = 0$			-1	$\mu\text{A}$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -5\text{V}, I_C = 0$			-1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-1.2	
DC current gain	$h_{FE}$	$V_{CE} = -5\text{V}, I_C = -100\text{mA}$	70		240	
Collector output capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		30		pF
Transition frequency	$f_T$	$V_{CE} = -10\text{V}, I_C = -100\text{mA}$		100		MHz

#### ■ Classification of $h_{FE}$

Type	KTA1659-O	KTA1659-Y
Range	70-140	120-240