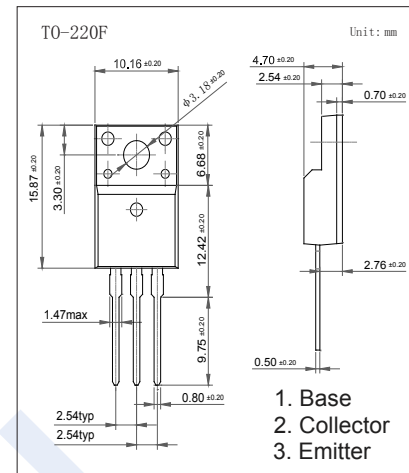


PNP Transistors

KTA1659A

■ Features

- High Transition Frequency
- Complementary to KTC4370A



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-180	V
Collector - Emitter Voltage	V_{CE0}	-180	
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}	$I_C = -100 \mu\text{A}, I_E = 0$	-180			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -10 \text{ mA}, I_B = 0$	-180			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -180\text{V}, I_E = 0$			-1	μA
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	KTA1659A-O	KTA1659A-Y
Range	70-140	120-240