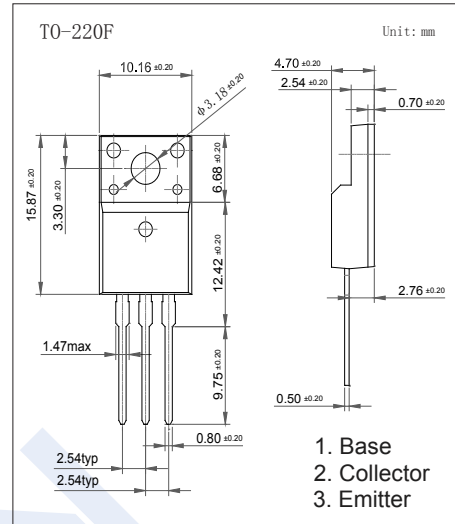


NPN Transistors

KTC4370A

■ Features

- High Transition Frequency
- Complementary to KTA1659A



■ 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_{CBO}	$V_{CB} = 180\text{V}, I_E = 0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}, I_c = 0$			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	
Base - emitter voltage	V_{BE}	$V_{CE} = 5\text{V}, I_c = 500\text{mA}$			1	
DC current gain	h_{FE}	$V_{CE} = 5\text{V}, I_c = 100\text{mA}$	70		240	
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		25		pF
Transition frequency	f_T	$V_{CE} = 10\text{V}, I_c = 100\text{mA}$		100		MHz

■ Classification of h_{fe}

Type	KTC4370A-O	KTC4370A-Y
Range	70-140	120-240