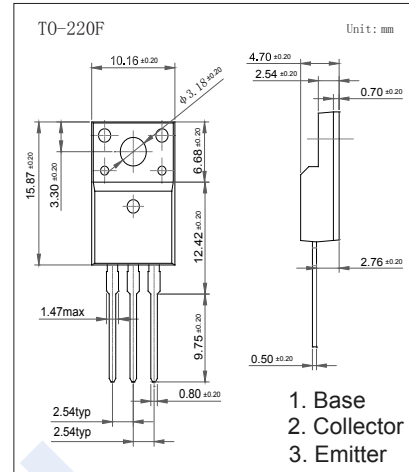


NPN Transistors

KTC2026

■ Features

- Low saturation voltage
- Complementary to KTA1046



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	60	V
Collector - Emitter Voltage	V_{CE0}	60	
Emitter - Base Voltage	V_{EB0}	7	
Collector Current - Continuous	I_C	3	A
Base Current	I_B	0.5	
Collector Power Dissipation	P_C	2	W
$T_a = 25^\circ\text{C}$ $T_c = 25^\circ\text{C}$		25	
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}	$I_C = 100\mu\text{A}, I_E = 0$	60			V	
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 50\text{ mA}, I_B = 0$	60				
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100\mu\text{A}, I_C = 0$	7				
Collector-base cut-off current	I_{CB0}	$V_{CB} = 60\text{ V}, I_E = 0$			0.1	μA	
Emitter cut-off current	I_{EB0}	$V_{EB} = 7\text{ V}, I_C = 0$			0.1		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2\text{ A}, I_B = 200\text{mA}$			1	V	
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 2\text{ A}, I_B = 200\text{mA}$			1.2		
Base - emitter voltage	V_{BE}	$V_{CE} = 5\text{ V}, I_C = 500\text{mA}$			1		
DC current gain	h_{FE}	$V_{CE} = 5\text{ V}, I_C = 500\text{mA}$	100		300		
Turn On Time	t_{on}			0.65		μs	
Storage Time	t_{stg}				1.3		
Fall Time	t_f				0.65		
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{MHz}$		35		pF	
Transition frequency	f_T	$V_{CE} = 5\text{ V}, I_C = 500\text{mA}$		30		MHz	

■ Classification of h_{fe}

Type	KTC2026-Y	KTC2026-G
Range	100-200	150-300

NPN Transistors

KTC2026

■ Typical Characteristics

