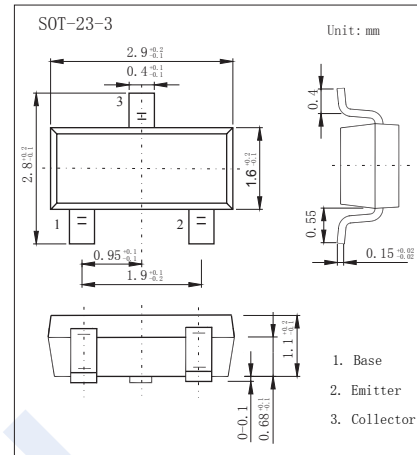


## NPN Transistors

### KTC3876 (KTC3876S)

#### ■ Features

- Excellent hFE Linearity
- Complementary to KTA1505/KTA1505S



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CBO</sub>	35	V
Collector - Emitter Voltage	V <sub>CEO</sub>	30	
Emitter - Base Voltage	V <sub>EBO</sub>	5	
Collector Current - Continuous	I <sub>C</sub>	500	mA
Base Current	I <sub>B</sub>	50	
Collector Power Dissipation	P <sub>C</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to 150	

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = 100μA, I <sub>E</sub> = 0	35			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = 1 mA, I <sub>B</sub> = 0	30			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> = 0	5			
Collector-base cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 35V, I <sub>E</sub> = 0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0			0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 100mA, I <sub>B</sub> = 10mA			0.25	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 100mA, I <sub>B</sub> = 10mA			1.2	
Base - emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA			1	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA	70		400	
		V <sub>CE</sub> = 6V, I <sub>C</sub> = 400mA	O	25		
			Y	40		
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 6V, I <sub>E</sub> = 0, f = 1MHz		7		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 6V, I <sub>C</sub> = 20mA		300		MHz

#### ■ Classification of h<sub>FE</sub>(1)

Type	KTC3876-O	KTC3876-Y	KTC3876-G
Range	70-140	120-240	200-400
Marking	WO	WY	WG