

**FEATURES**

- High hFE
- Complementary to KTA1505

**KTC3876(NPN)**



**Maximum Ratings (TA=25 °C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CBO</sub>	35	V
Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current -Continuous	I <sub>C</sub>	0.5	A
Collector Power dissipation	P <sub>C</sub>	0.2	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55to +150	°C

**ELECTRICAL CHARACTERISTICS ( @ Ta=25°C unless otherwise specified)**

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> = 1mA, I <sub>B</sub> =0	30			V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 35V, I <sub>E</sub> =0			0.1	uA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> =0			0.1	uA
DC current gain	h <sub>FE1</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 100mA	70		400	
	h <sub>FE2</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> = 400mA O Y	25 40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> = 10mA			0.25	V
base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =1V, I <sub>B</sub> = 100mA			1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =20mA		300		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=1MHz		7		pF

**CLASSIFICATION OF hFE**

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

**KTC3876** Typical Characteristics

