

FEATURES

- High hFE
- Complementary to KTA1505

KTC3876(NPN)



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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	35	V
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _C	0.5	A
Collector Power dissipation	P _C	0.2	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55to +150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{CBO}	I _C =100μA, I _E =0	35			V
Collector-emitter breakdown voltage	V _{CEO}	I _C = 1mA, I _B =0	30			V
Emitter-base breakdown voltage	V _{EBO}	I _E = 100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} = 35V, I _E =0			0.1	uA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C =0			0.1	uA
DC current gain	h _{FE1}	V _{CE} =1V, I _C = 100mA	70		400	
	h _{FE2}	V _{CE} =6V, I _C = 400mA	O Y	25 40		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B = 10mA			0.25	V
base-emitter voltage	V _{BE}	V _{CE} =1V, I _B = 100mA			1	V
Transition frequency	f _T	V _{CE} =6V, I _C =20mA		300		MHz
Collector output capacitance	C _{ob}	V _{CB} =6V, I _E =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

