

FEATURES

- High power gain


KTC3879 (NPN)

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	35	V
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Base Voltage	V _{EBO}	4	V
Collector Current -Continuous	I _C	50	mA
Collector Power dissipation	P _C	0.15	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 _{CB0}	I _C =100μA, I _E =0	35			V
Collector-emitter breakdown voltage	V _{CEO}	I _C =100μA, I _B =0	30			V
Emitter-base breakdown voltage	V _{EBO}	I _E =100μA, I _C =0	4			V
Collector cut-off current	I _{CB0}	V _{CB} =35V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			1.0	μA
DC current gain	h _{FE}	V _{CE} =12V, I _C =2mA	40		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.4	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA			1.0	V
Transition frequency	f _T	V _{CE} =10V, I _C =1mA	100		400	MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz	1.4	2.0	3.2	pF

CLASSIFICATION OF h_{FE}

Rank	R	O	Y
Range	40-80	70-140	120-240
Marking	RR	RO	RY

KTC3879 Typical Characteristics

