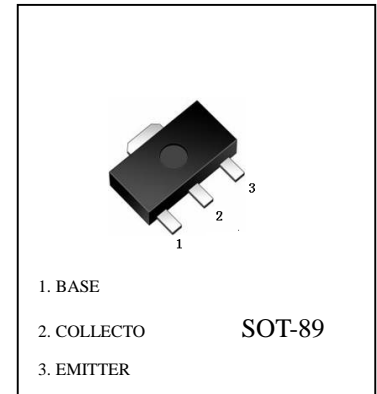


FEATURES

- High voltage

KTC4378 (NPN)
Maximum Ratings (Ta=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	80	V
Collector-Emitter Voltage	V _{CEO}	60	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _C	1	A
Collector Power dissipation	P _C	500	mW
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 =1mA, I _E =0	80			V
Collector-emitter breakdown voltage	V _{CEO}	I _C =10mA, I _B =0	60			V
Emitter-base breakdown voltage	V _{EBO}	I _E =1mA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =50V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =2V, I _C =0.05A	100		320	
	h _{FE(2)}	V _{CE} =2V, I _C =1A	30			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500mA, I _B =50mA			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =500mA, I _B =50mA			1.2	V
Transition frequency	f _T	V _{CE} =10V, I _C =50mA		150		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		12		pF

CLASSIFICATION OF h_{FE}

Rank	Y	GR
Range	100-200	160-320
Marking	TY	TGR

KTC4378 Typical Characteristics

