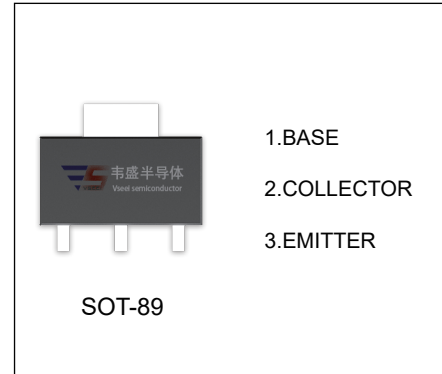


HM4033 TRANSISTOR (PNP)

FEATURES

- High Current
- General Purpose Amplifier Applications



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-80	V
V _{CEO}	Collector-Emitter Voltage	-80	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-1	A
P _C	Collector Power Dissipation	500	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	250	°C/W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0	-80			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA, I _B =0	-80			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-5			V
Collector cut-off current	I _{CB0}	V _{CB} =-60V, I _E =0			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC current gain	h _{FE(1)} *	V _{CE} =-5V, I _C =-0.1mA	75			
	h _{FE(2)} *	V _{CE} =-5V, I _C =-100mA	100			
	h _{FE(3)} *	V _{CE} =-5V, I _C =-500mA	70			
	h _{FE(4)} *	V _{CE} =-5V, I _C =-1A	25			
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =-150mA, I _B =-15mA			-0.15	V
		I _C =-500mA, I _B =-50mA			-0.5	V
Base-emitter saturation voltage	V _{BE(sat)} *	I _C =-150mA, I _B =-15mA			-0.9	V
		I _C =-500mA, I _B =-50mA			-1.1	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-50mA, f=100MHz	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			20	pF

*Pulse test