HM4033 TRANSISTOR (PNP)

1.BASE
2.COLLECTOR
3.EMITTER

SOT-89

FEATURES

- High Current
- General Purpose Amplifier Applications

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	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
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ 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_{CBO}	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