

TRANSISTOR(NPN)

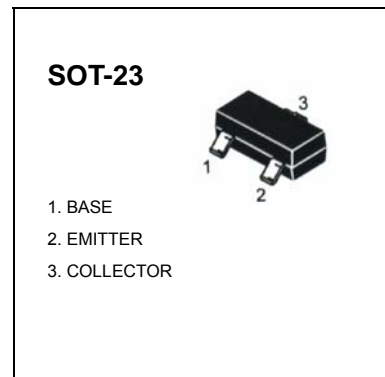
FEATURES

Driver transistor

MARKING :1H

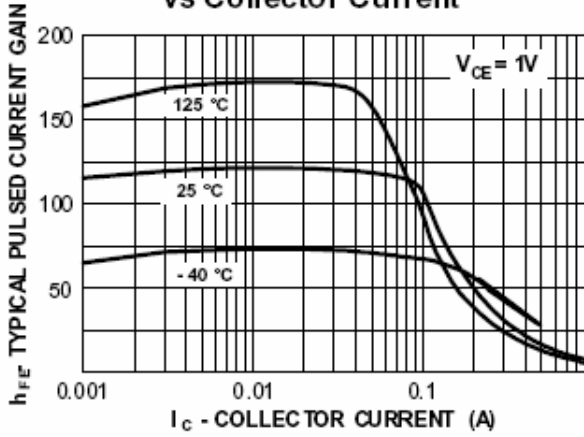
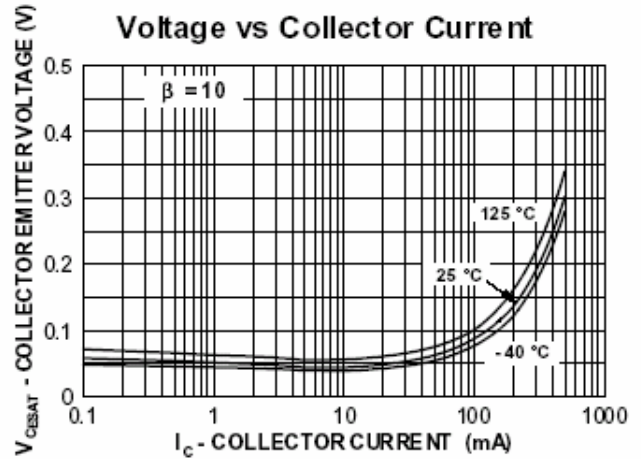
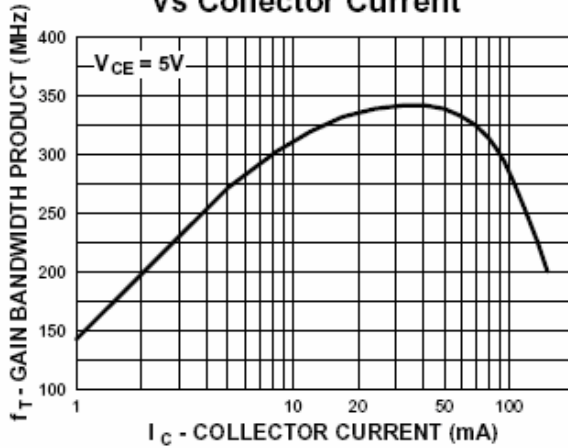
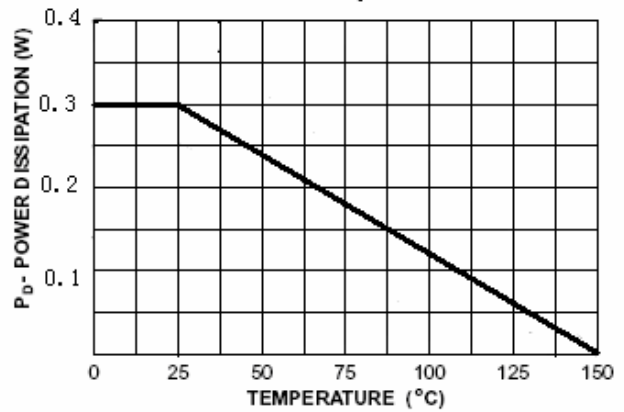
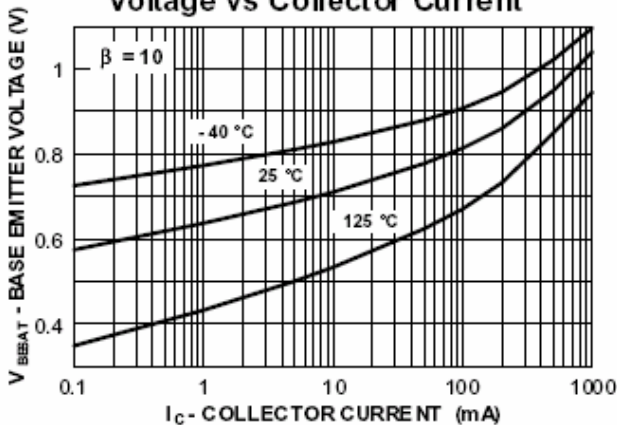
MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	60	V
V_{CE0}	Collector-Emitter Voltage	60	V
V_{EB0}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	0.5	A
P_C	Collector Power Dissipation	300	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=60\text{V}, I_B=0$			0.1	μA
Collector cut-off current	I_{EBO}	$V_{EB}=3\text{V}, I_C=0$			0.1	μA
DC current gain	h_{FE1}	$V_{CE}=1\text{V}, I_C=10\text{mA}$	100		400	
	h_{FE2}	$V_{CE}=1\text{V}, I_C=100\text{mA}$	100			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			0.25	V
Base-emitter voltage	V_{BE}	$V_{CE}=1\text{V}, I_C=100\text{mA}$			1.2	V
Transition frequency	f_T	$V_{CE}=2\text{V}, I_C=10\text{mA}$ $f=100\text{MHz}$	100			MHz

Typical Pulsed Current Gain vs Collector Current

Collector-Emitter Saturation Voltage vs Collector Current

Gain Bandwidth Product vs Collector Current

Power Dissipation vs Ambient Temperature

Base-Emitter Saturation Voltage vs Collector Current

Base Emitter ON Voltage vs Collector Current
