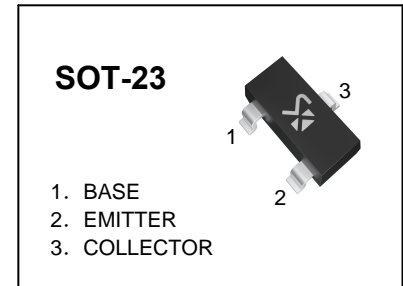


NPN Silicon Epitaxial Planar Transistor

For switching and amplifier applications.
Especially suitable for AF-driver stages and
low power output stages.



MARKING: Y1

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

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	1000	mA
P_C	Collector Power Dissipation	1000	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	$V_{(BR)CBO}$	$I_C=0.1\text{mA}$, $I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$, $I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.1\text{mA}$, $I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=35\text{V}$, $I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}$, $I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1\text{V}$, $I_C=100\text{mA}$	85		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=800\text{mA}$, $I_B=80\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=800\text{mA}$, $I_B=80\text{mA}$			1.2	V
Transition frequency	f_T	$V_{CE}=6\text{V}$, $I_C=20\text{mA}$ $f=30\text{MHz}$	150			MHz

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

