

TRANSISTOR (NPN)

FEATURES

- Low current (max. 50mA)
- High voltage (max. 300V).
- Video output stages.

Marking: DC

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

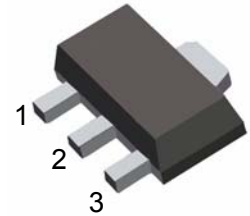
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	50	mA
P_C	Collector Power Dissipation	500	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER

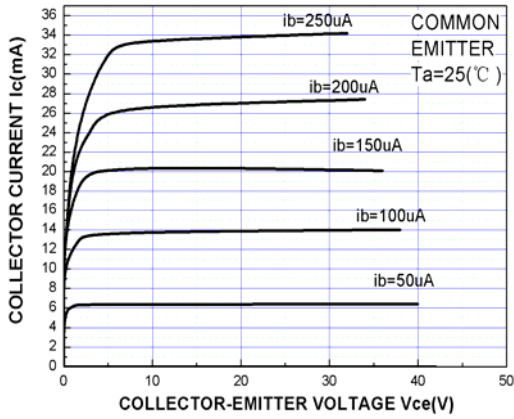


ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

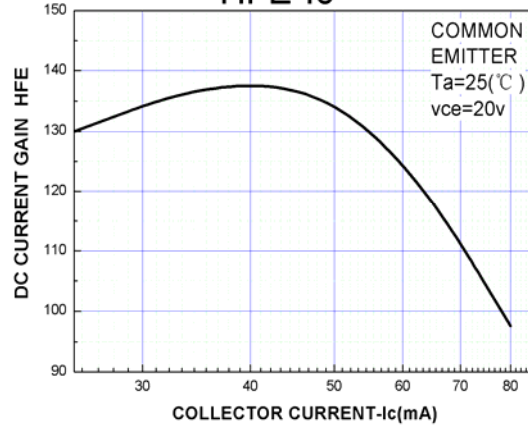
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}$, $I_E=0$	300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$, $I_B=0$	300			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}$, $I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=200\text{V}$, $I_E=0$			10	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$			50	nA
DC current gain	h_{FE}	$V_{CE}=20\text{V}$, $I_C=25\text{mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=30\text{mA}$, $I_B=5\text{mA}$			0.6	V
Transition frequency	f_T	$V_{CE}=10\text{V}$, $I_C=10\text{mA}$, $f=100\text{MHz}$	60			MHz

Typical Characteristics

Ic-Vce



HFE-Ic



Pc-Ta

