

■■ APPLICATION: High Voltage Amplifier Applications.

■■ MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	300	V
Collector-emitter voltage	V_{CEO}	300	V
Emitter-base voltage	V_{EBO}	6V	
Collector current	I_C	100	mA
Collector Power Dissipation	P_C	900	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55~150	$^{\circ}\text{C}$


■■ ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h_{FE}	40		200		$V_{CE}=10\text{V}$, $I_C=10\text{mA}$
Collector Cut-off Current	I_{CBO}			1	μA	$V_{CB}=200\text{V}$, $I_E=0$
Emitter Cut-off Current	I_{EBO}			1	μA	$V_{EB}=6\text{V}$, $I_C=0$
Collector-Base Breakdown Voltage	BV_{CBO}	300			V	$I_C=0.05\text{mA}$, $I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	300			VI	$c=1\text{mA}$, $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	6			VI	$I_E=0.05\text{mA}$, $I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.6	V	$I_C=20\text{mA}$, $I_B=2\text{mA}$
Gain bandwidth product	f_T	50			MHz	$I_C=10\text{mA}$, $V_{CE}=30\text{V}$
Common Base Output Capacitance	C_{ob}			7.5	PF	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$

■■ h_{FE} Classification And Marking

Classification	C	D	E
h_{FE}	40~80	60~120	100~200