



HIGH VOLTAGE TRANSISTOR

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

T_{stg}	— Storage Temperature	$-55\sim 150^{\circ}\text{C}$
T_j	— Junction Temperature	150°C
P_C	— Collector Dissipation	625mW
V_{CBO}	— Collector-Base Voltage	-300V
V_{CEO}	— Collector-Emitter Voltage	-300V
V_{EBO}	— Emitter-Base Voltage	-5V
I_C	— Collector Current	-500mA

TO-92



- 1—Emitter, E
2—Base, B
3—Collector, C

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

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	-300			V	$I_C=-100\mu\text{A}$, $I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	-300			V	$I_C=-1\text{mA}$, $I_B=0$
BV_{EBO}	Emitter-Base Breakdown Voltage	-5			V	$I_E=-100\mu\text{A}$, $I_C=0$
I_{CBO}	Collector Cut-off Current			-250	nA	$V_{\text{CB}}=-200\text{V}$, $I_E=0$
I_{EBO}	Emitter-Base Cut-off Current			-100	nA	$V_{\text{EB}}=-3\text{V}$, $I_C=0$
I_{CES}	Collector Cut-off Current			-100	nA	$V_{\text{CE}}=-300\text{V}$, $V_{\text{BE}}=0$
$H_{\text{FE}}(1)$	DC Current Gain	25				$V_{\text{CE}}=-10\text{V}$, $I_C=-1\text{mA}$
$H_{\text{FE}}(2)$		40				$V_{\text{CE}}=-10\text{V}$, $I_C=-10\text{mA}$
$H_{\text{FE}}(3)$		50				$V_{\text{CE}}=-10\text{V}$, $I_C=-30\text{mA}$
$V_{\text{CE(sat1)}}$	Collector- Emitter Saturation Voltage			-0.5	V	$I_C=-20\text{mA}$, $I_B=-2\text{mA}$
$V_{\text{CE(sat2)}}$				-1	V	$I_C=-60\text{mA}$, $I_B=-6\text{mA}$
$V_{\text{BE(sat1)}}$	Base-Emitter Saturation Voltage			-0.9	V	$I_C=-20\text{mA}$, $I_B=-2\text{mA}$
f_T	Current Gain-Bandwidth Product	50			MHz	$V_{\text{CE}}=-20\text{V}$, $I_C=-10\text{mA}$ $F=100\text{MHz}$