



APPLICATIONS

Small Signal Amplifier ; High Frequency oscillator ; Switching Applications.
(complement To H3906)

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

T_{stg} —Storage Temperature.....	-55~150
T_j —Junction Temperature.....	150
P_C —Collector Dissipation.....	625mW
V_{CBO} —Collector-Base Voltage.....	60V
V_{CEO} —Collector-Emitter Voltage.....	40V
V_{EBO} —Emitter-Base Voltage.....	5V
I_C —Collector Current.....	200mA

TO-92



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

ELECTRICAL CHARACTERISTICS ($T_a=25$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	60			V	$I_C=100\mu A$, $I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	40			V	$I_C=10mA$, $I_B=0$
BV_{EBO}	Emitter- Base Breakdown Voltage	5			V	$I_E=10\mu A$, $I_C=0$
I_{CBO}	Collector Cut-off Current			0.1	μA	$V_{CB}=60V$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			0.1	μA	$V_{EB}=5V$, $I_C=0$
h_{FE}	DC Current Gain	70		350		$V_{CE}=1V$, $I_C=10mA$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage			0.2	V	$I_C=10mA$, $I_B=1mA$
$V_{BE(sat)}$	Base- Emitter Saturation Voltage			0.85	V	$I_C=10mA$, $I_B=1mA$
f_T	Current Gain-Bandwidth Product	300			MHZ	$V_{CE}=20V$, $I_C=10mA$ $f=100MHZ$

h_{FE} Classification

A

B

70—240

220—350