

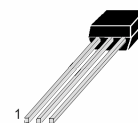
**APPLICATIONS**

Switching Circuit , Interface Circuit.

ABSOLUTE MAXIMUM RATINGS ($T_a=25$)

T_{stg}	Storage Temperature.....	-55~150
T_j	Junction Temperature.....	150
P_C	Collector Dissipation.....	300mW
V_{CBO}	Collector-Base Voltage.....	-50V
V_{CEO}	Collector-Emitter Voltage.....	-50V
V_{EBO}	Emitter-Base Voltage.....	-10V
I_C	Collector Current.....	-100mA

TO-92S



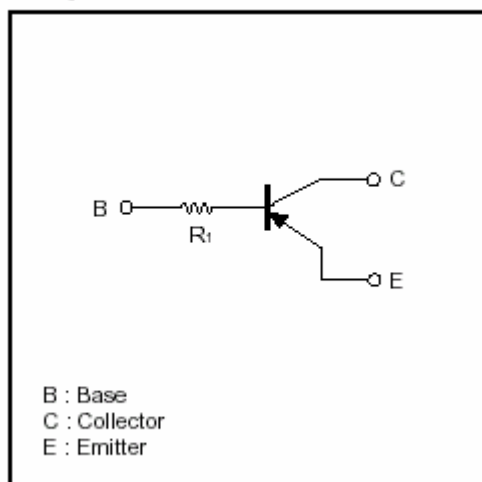
1—Emitter , E
2—Collector,C
3—Base , B

ELECTRICAL CHARACTERISTICS ($T_a=25$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	-50			V	$I_C=-10\mu A, I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	-50			V	$I_C=-0.1mA, I_B=0$
I_{CBO}	Collector Cut-off Current			-0.1	μA	$V_{CB}=-40V, I_E=0$
I_{CEO}	Collector Cut-off Current			-0.5	μA	$V_{CE}=-40V, I_B=0$
I_{EBO}	Emitter Cut-off Current	-410	-532	-760	μA	$V_{EB}=-5V, I_C=0$
H_{FE}	DC Current Gain	50				$V_{CE}=-5V, I_C=-10mA$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		-0.1	-0.3	V	$I_C=-10mA, I_B=-0.5mA$
$V_I(off)$	Input Off Voltage	-0.8	-1.1	-1.5	V	$V_{CE}=-5V, I_C=-0.1mA$
$V_I(on)$	Input On Voltage	-1.0	-1.9	-4.0	V	$V_{CE}=-0.2V, I_C=-20mA$
R1	Input Resistor	3.3	4.7	6.1	Kohm	
R2/R1	Resistance Ratio	0.9	1.0	1.1		
f _r	Current Gain-Bandwidth Product		250		MHz	$V_{CE}=-10V, I_C=-5mA$
C _{ob}	Output Capacitance		3.7		pF	$V_{CB}=-10V, f=1MHz$



●Equivalent circuit



●Electrical characteristic curves

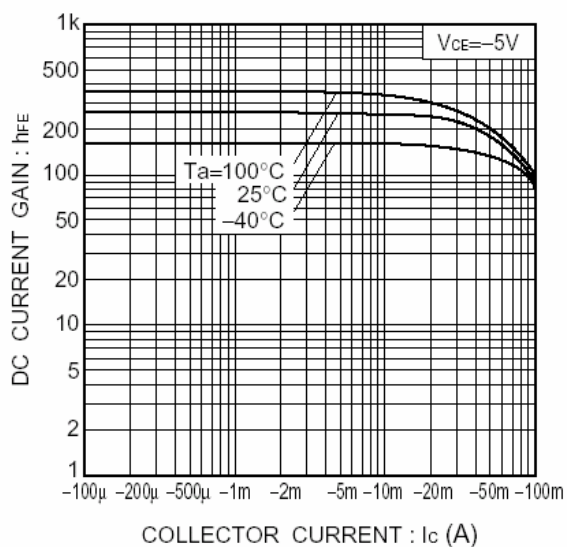


Fig.1 DC current gain vs. collector current

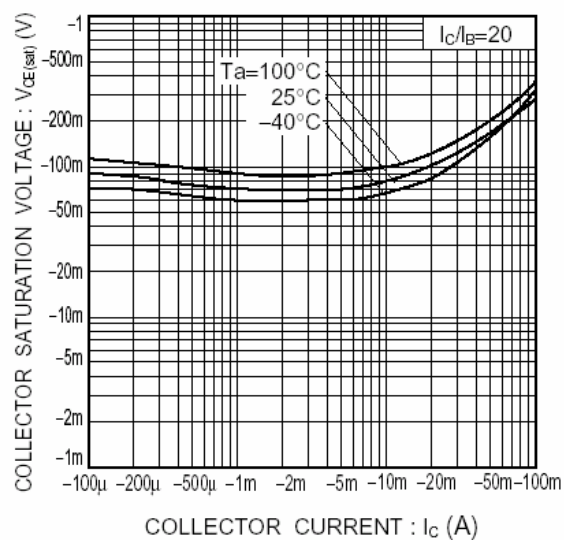


Fig.2 Collector-emitter saturation voltage vs. collector current