

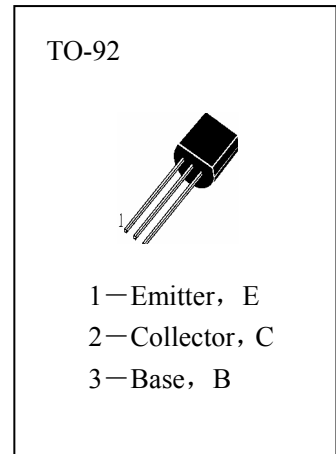


■ APPLICATIONS

General Purpose Application.
Switching Application.

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

- T_{stg} —Storage Temperature..... -55~150 $^\circ\text{C}$
- T_j —Junction Temperature.....150 $^\circ\text{C}$
- P_C —Collector Dissipation.....400mW
- V_{CBO} —Collector-Base Voltage.....-50V
- V_{CEO} —Collector-Emitter Voltage.....-50V
- V_{EBO} —Emitter-Base Voltage.....-5V
- I_C —Collector Current.....-150mA
- I_b —Base Current.....-50mA

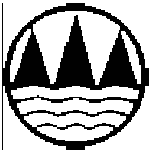


■ ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

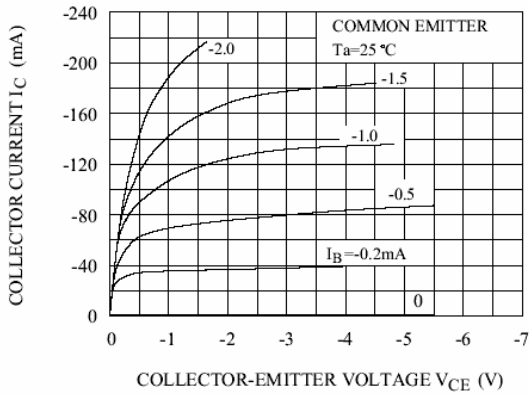
Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	-50			V	$I_C=-100\mu\text{A}, I_E=0$
BVCEO	Collector-Emitter Breakdown Voltage	-50			V	$I_C=-1\text{mA}, I_B=0$
BVEBO	Emitter-Base Breakdown Voltage	-5			V	$I_E=-10\mu\text{A}, I_C=0$
HFE (1)	DC Current Gain	70		400		$V_{CE}=-6\text{V}, I_C=-2\text{mA}$
HFE (2)	DC Current Gain	25				$V_{CE}=-6\text{V}, I_C=-150\text{mA}$
$V_{CE(sat)}$	Collector- Emitter Saturation Voltage		-0.1	-0.3	V	$I_C=-100\text{mA}, I_B=-10\text{mA}$
$V_{BE(sat)}$	Base-Emitter Saturation Voltage			-1.1	V	$I_C=-100\text{mA}, I_B=-10\text{mA}$
ICBO	Collector Cut-off Current			-100	nA	$V_{CB}=-50\text{V}, I_E=0$
IEBO	Emitter Cut-off Current			-100	nA	$V_{EB}=-5\text{V}, I_C=0$
f_T	Current Gain-Bandwidth Product	80			MHz	$V_{CE}=-10\text{V}, I_C=-10\text{mA}$
Cob	Output Capacitance		4	7	pF	$V_{CB}=-50\text{V}, I_E=0, f=1\text{MHz}$

■ hFE Classification

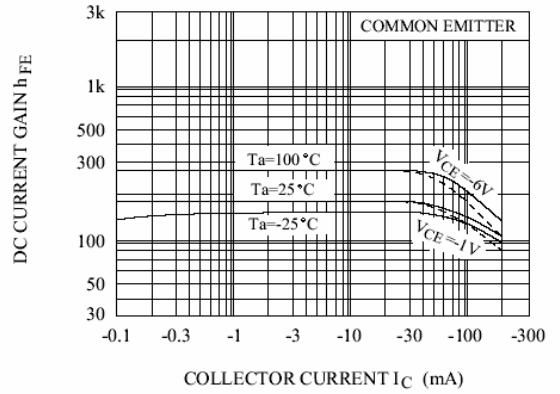
O	Y	GR
70—140	120—240	200—400



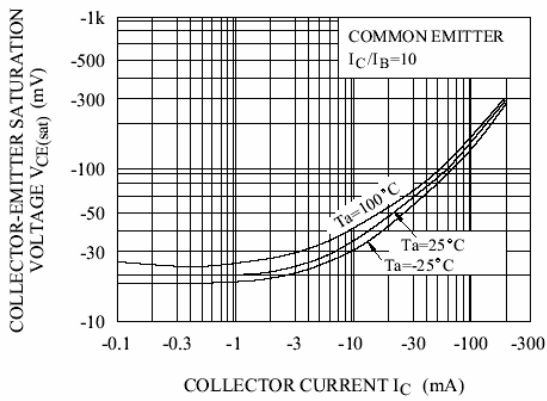
$I_C - V_{CE}$



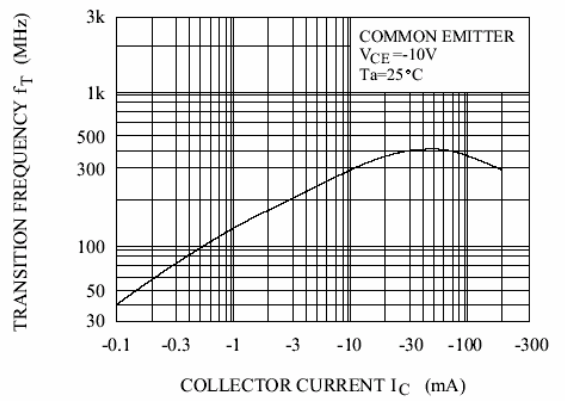
$h_{FE} - I_C$



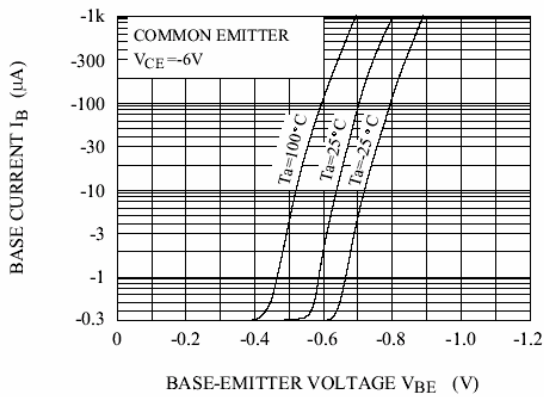
$V_{CE(sat)} - I_C$



$f_T - I_C$



$I_B - V_{BE}$



$P_C - T_a$

