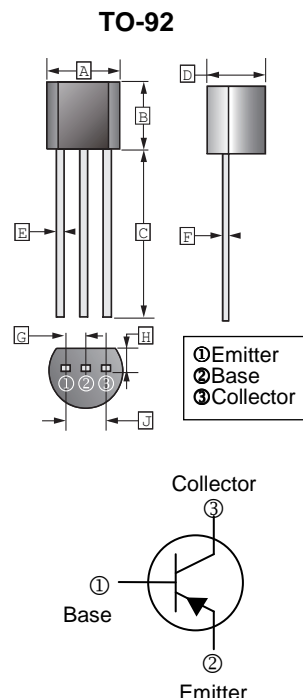


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURE

- Power Dissipation



## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CB0}$	-40	V
Collector to Emitter Voltage	$V_{CE0}$	-25	V
Emitter to Base Voltage	$V_{EB0}$	-6	V
Collector Current - Continuous	$I_C$	-800	mA
Collector Power Dissipation	$P_C$	625	mW
Junction, Storage Temperature	$T_J, T_{STG}$	125, -55~125	$^\circ\text{C}$

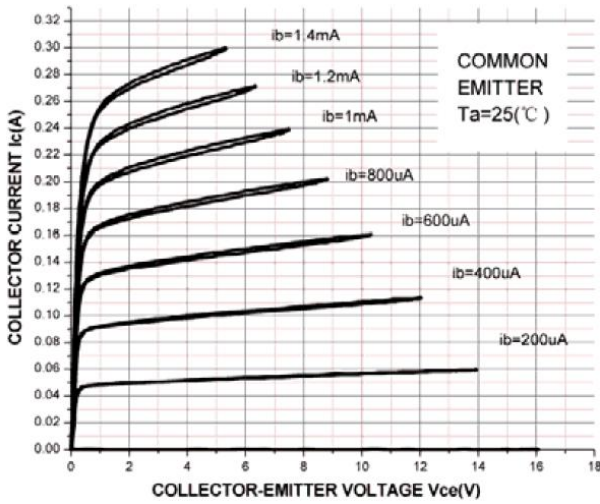
## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Collector to Base Breakdown Voltage	$V_{(BR)CB0}$	-40	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CE0}$	-25	-	-	V	$I_C=0.1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EB0}$	-6	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CB0}$	-	-	-0.1	$\mu\text{A}$	$V_{CB}=-35\text{V}, I_E=0$
Collector Cut-Off Current	$I_{CE0}$	-	-	-0.1	$\mu\text{A}$	$V_{CE}=-20\text{V}, I_B=0$
DC Current Gain	$h_{FE(1)}$	45	-	-		$V_{CE}=-1\text{V}, I_C=-5\text{mA}$
	$h_{FE(2)}$	80	-	400		$V_{CE}=-1\text{V}, I_C=-100\text{mA}$
	$h_{FE(3)}$	40	-	-		$V_{CE}=-1\text{V}, I_C=-800\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C=-800\text{mA}, I_B=-80\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1.2	V	$I_C=-800\text{mA}, I_B=-80\text{mA}$
Transition Frequency	$f_T$	80	-	-	MHz	$V_{CE}=-6\text{V}, I_C=-20\text{mA}, f=30\text{MHz}$

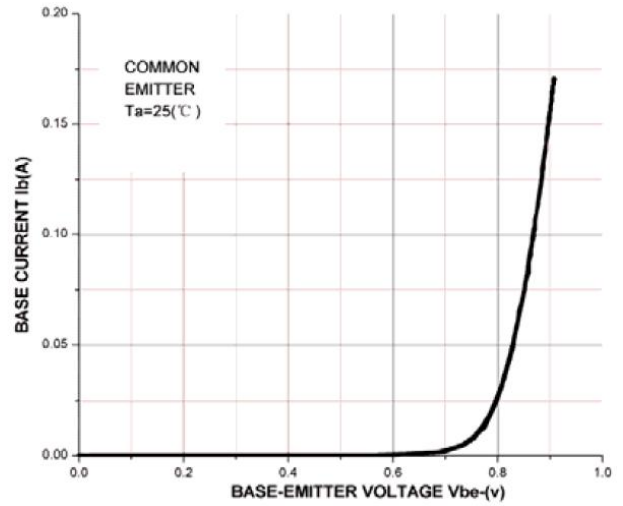
\*Pulse Test : pulse width  $\leq 300 \mu\text{s}$ , duty cycle  $\leq 2\%$ .

**CHARACTERISTIC CURVES**

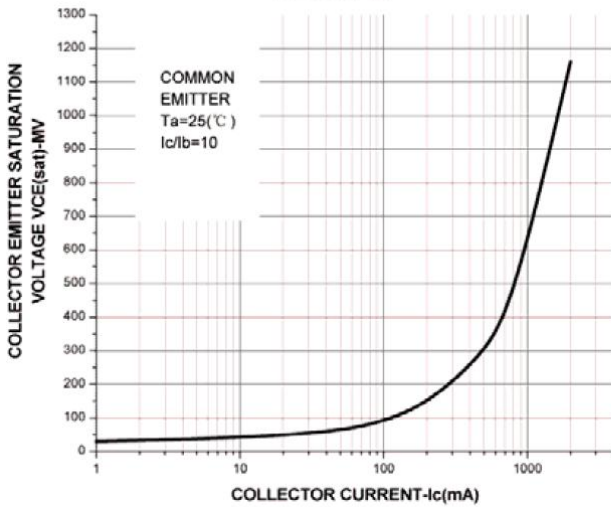
**Ic-Vce**



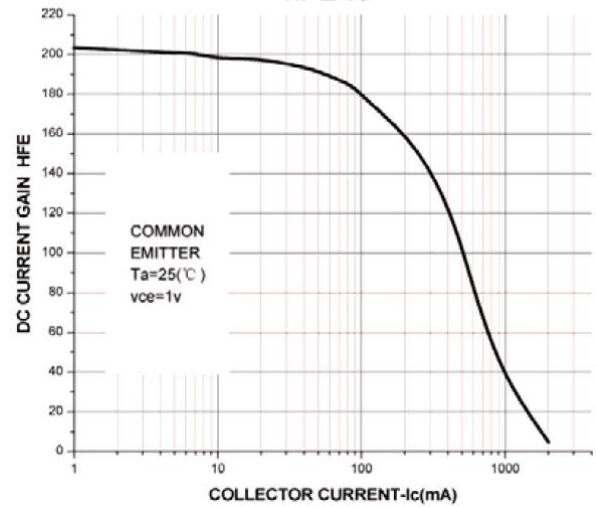
**Ib-Vbe**



**Vcesat-Ic**



**hFE-Ic**



**Pc-Ta**

