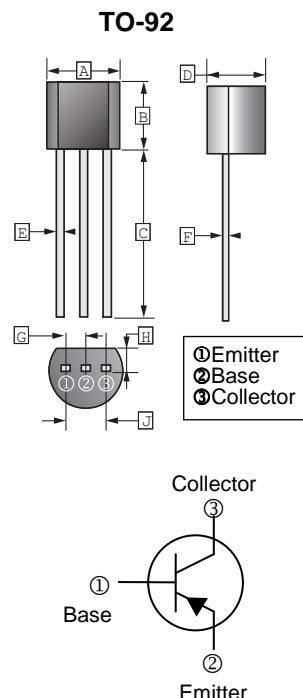


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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_{EBO}	-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	$^\circ\text{C}$

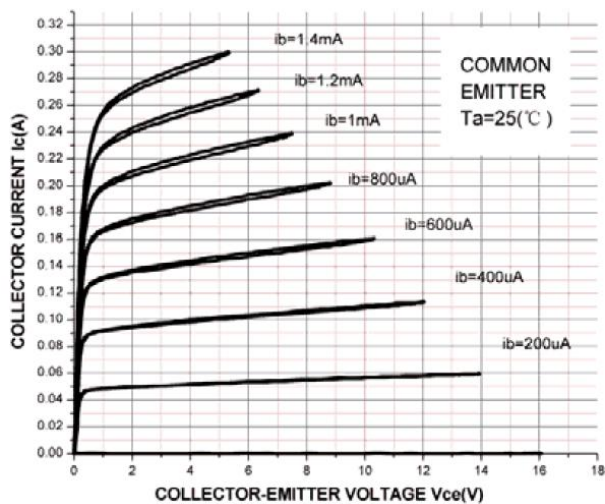
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

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	$V_{(BR)EBO}$	-6	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CB0}	-	-	-0.1	μA	$V_{CB}=-35\text{V}, I_E=0$
Collector Cut-Off Current	I_{CE0}	-	-	-0.1	μA	$V_{CE}=-20\text{V}, I_B=0$
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	$V_{CE}=-6\text{V}, I_C=-20\text{mA}, f=30\text{MHz}$

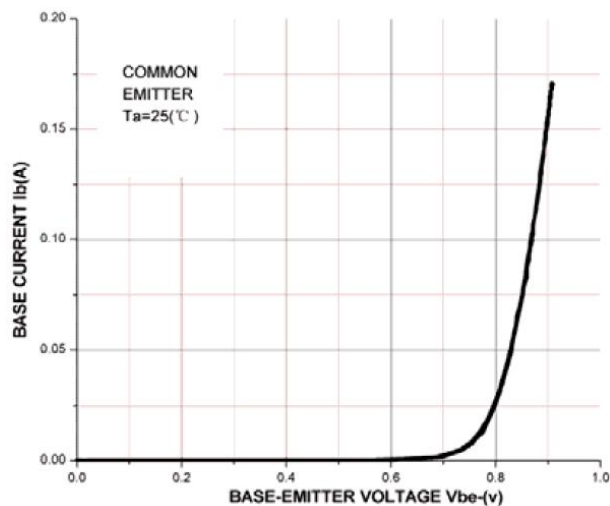
*Pulse Test : pulse width $\leq 300 \mu\text{s}$, duty cycle $\leq 2\%$.

CHARACTERISTIC CURVES

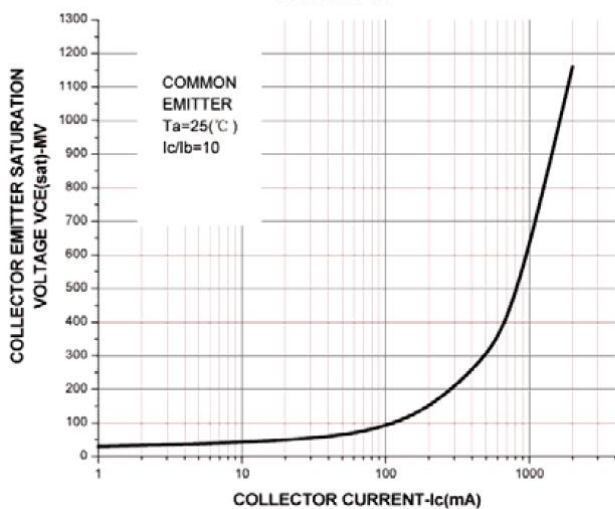
Ic-Vce



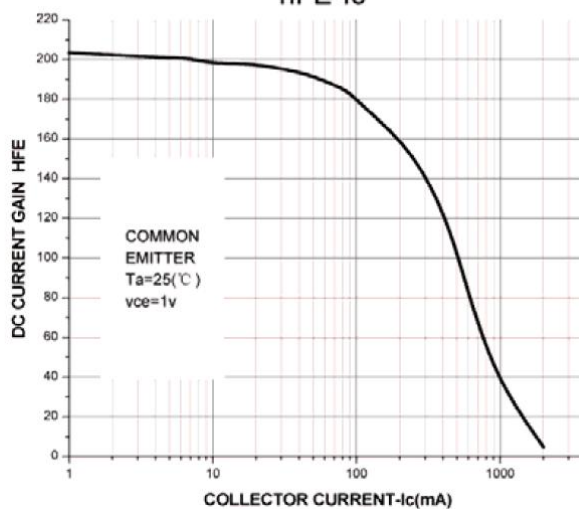
Ib-Vbe



Vcesat-Ic



hFE-Ic



Pc-Ta

