

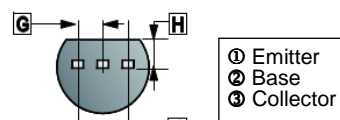
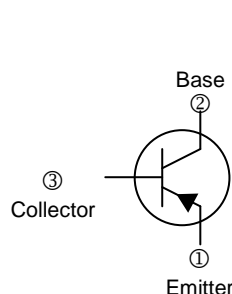
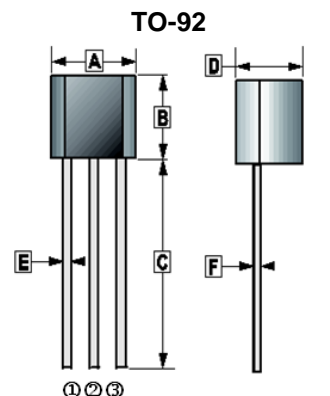
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURE

- General Purpose Switching and Amplification.

## CLASSIFICATION OF $h_{FE}$

Product-Rank	BC212	BC212B	BC212C
Range	140~600	140~400	350~600



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.70	F	0.30	0.51
B	4.30	4.70	G	1.27 TYP.	
C	12.70	-	H	1.10	1.40
D	3.30	3.81	J	2.42	2.66
E	0.36	0.56	K	0.36	0.76

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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CB0}$	-60	V
Collector to Emitter Voltage	$V_{CE0}$	-50	V
Emitter to Base Voltage	$V_{EB0}$	-5	V
Collector Current - Continuous	$I_C$	-0.1	A
Collector Power Dissipation	$P_C$	350	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	357	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-60	-	-	V	$I_C = -0.01\text{mA}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-50	-	-	V	$I_C = -2\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -0.01\text{mA}, I_C = 0$
Collector Cut-Off Current	$I_{CBO}$	-	-	-15	nA	$V_{CB} = -30\text{V}, I_E = 0$
Collector Cut-Off Current	$I_{CEO}$	-	-	-0.1	$\mu\text{A}$	$V_{CE} = -30\text{V}, I_B = 0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	-15	nA	$V_{EB} = -4\text{V}, I_C = 0$
DC Current Gain	BC212	140	-	600		$V_{CE} = -5\text{V}, I_C = -2\text{mA}$
	BC212B	140	-	400		
	BC212C	350	-	600		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.6	V	$I_C = -100\text{mA}, I_B = -5\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1.2	V	$I_C = -100\text{mA}, I_B = -5\text{mA}$
Base to Emitter Voltage	$V_{BE}$	-	-	-0.72	V	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$
Collector Output Capacitance	$C_{ob}$	-	-	6	pF	$V_{CB} = -10\text{V}, I_C = 0, f = 1\text{MHz}$
Transition Frequency	$f_T$	200	-	-	MHz	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$