

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

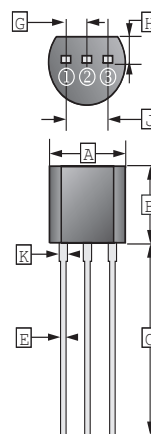
FEATURES

- High Voltage.

CLASSIFICATION OF h_{FE} (2)

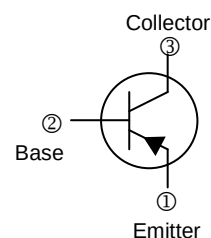
Product-Rank	A92-A	A92-B1	A92-B2	A92-C
Range	80~100	100~150	150~200	200~250

TO-92



① Emitter
② Base
③ Collector

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



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-300	V
Collector to Emitter Voltage	V_{CEO}	-300	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-500	mA
Collector Power Dissipation	P_C	625	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	200	$^\circ\text{C} / \text{mW}$
Thermal Resistance From Junction to Case	$R_{\theta JC}$	83.3	$^\circ\text{C} / \text{mW}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-300	-	-	V	$I_C = -100\mu\text{A}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300	-	-	V	$I_C = -1\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut-Off Current	I_{CBO}	-	-	-0.25	μA	$V_{CB} = -200\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain	$h_{FE(1)}$	60	-	-		$V_{CE} = -10\text{V}, I_C = -1\text{mA}$
	$h_{FE(2)}$	80	-	250		$V_{CE} = -10\text{V}, I_C = -10\text{mA}$
	$h_{FE(3)}$	60	-	-		$V_{CE} = -10\text{V}, I_C = -80\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.2	V	$I_C = -20\text{mA}, I_B = -2\text{mA}$
Base to Emitter Voltage	$V_{BE(sat)}$	-	-	-0.9	V	$I_C = -20\text{mA}, I_B = -2\text{mA}$
Transition Frequency	f_T	50	-	-	MHz	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$

CHARACTERISTIC CURVES

