

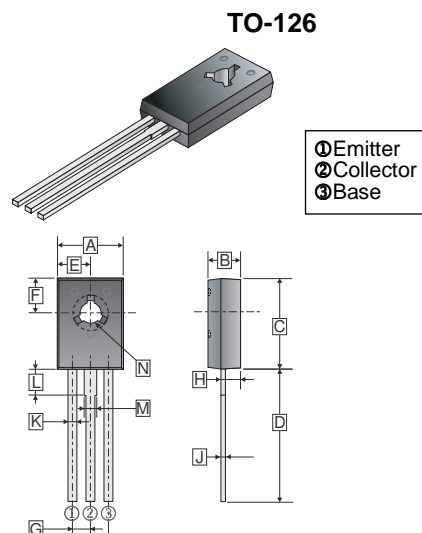
RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- High Current
- High Transition Frequency

CLASSIFICATION OF h_{FE}

Product-Rank	BD034-R	BD034-S	BD034-T
Range	100~200	140~280	200~400



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	7.40	7.80	H	1.10	1.50
B	2.50	2.90	J	0.45	0.60
C	10.60	11.00	K	0.66	0.86
D	15.30	15.70	L	2.10	2.30
E	3.70	3.90	M	1.17	1.37
F	3.90	4.10	N	3.00	3.20
G	2.29 TYP.				

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

Parameter	Symbol	Ratings	Unit
Collector - Base Voltage	V_{CBO}	-110	V
Collector - Emitter Voltage	V_{CEO}	-95	V
Emitter - Base Voltage	V_{EBO}	-7	V
Collector Current -Continuous	I_C	-2.5	A
Collector Power Dissipation	P_C	1.25	W
Maximum Junction to Ambient	$R_{\theta JA}$	100	$^\circ\text{C} / \text{W}$
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 - Base Breakdown Voltage	$V_{(BR)CBO}$	-110	-	-	V	$I_C = -0.1\text{mA}, I_E = 0$
Collector-emitter sustaining voltage ¹	$V_{CEO(SUS)}$	-95	-	-	V	$I_C = -10\text{mA}, I_B = 0$
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	-7	-	-	V	$I_C = 0, I_E = -0.1\text{mA}$
Collector Cut - Off Current	I_{CBO}	-	-	-1	μA	$V_{CB} = -100\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-1	μA	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain ¹	h_{FE}	100	-	400		$V_{CE} = -2\text{V}, I_C = -100\text{mA}$
		40	-	-		$V_{CE} = -2\text{V}, I_C = -1.5\text{mA}$
Collector - Emitter Saturation Voltage ¹	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -2\text{A}, I_B = -200\text{mA}$
Base - Emitter Voltage ¹	V_{BE}	-	-	-1	V	$V_{CE} = -5\text{V}, I_C = -500\text{mA}$
Transition frequency	f_T	3	-	-	MHz	$V_{CE} = -1\text{V}, I_C = -250\text{mA}, f = 1\text{MHz}$