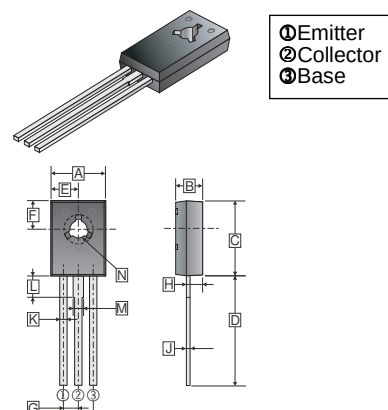


RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- High Current
- Amplifier and Switching Applications

TO-18



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}	-30	V
Collector - Emitter Voltage	V_{CEO}	-30	V
Emitter - Base Voltage	V_{EBO}	-6	V
Collector Current -Continuous	I_C	-5	A
Collector Power Dissipation	P_C	1	W
Maximum Junction to Ambient	$R_{\theta JA}$	125	$^{\circ}\text{C} / \text{W}$
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	$V_{(BR)CBO}$	-30	-	-	V	$I_C = -0.1\text{mA}, I_E = 0$
Collector-Emitter Breakdown voltage	$V_{(BR)CEO}$	-30	-	-	V	$I_C = -1\text{mA}, I_B = 0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-	-	V	$I_C = 0, I_E = -0.1\text{mA}$
Collector Cut-Off Current	I_{CBO}	-	-	-0.1	μA	$V_{CB} = -30\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -6\text{V}, I_C = 0$
DC Current Gain	$h_{FE(1)}$	150	-	600		$V_{CE} = -2\text{V}, I_C = -1\text{A}$
	$h_{FE(2)}$	50	-	-		$V_{CE} = -2\text{V}, I_C = -4\text{A}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	-	-	-0.15	V	$I_C = -1\text{A}, I_B = -50\text{mA}$
	$V_{CE(sat)2}$	-	-	-0.25		$I_C = -2\text{A}, I_B = -100\text{mA}$
	$V_{CE(sat)3}$	-	-	-0.5		$I_C = -4\text{A}, I_B = -200\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1.5	V	$I_C = -1\text{A}, I_B = -100\text{mA}$
Transition frequency	f_T	-	95	-	MHz	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$
Collector output capacitance	C_{ob}	-	100	-	pF	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$