

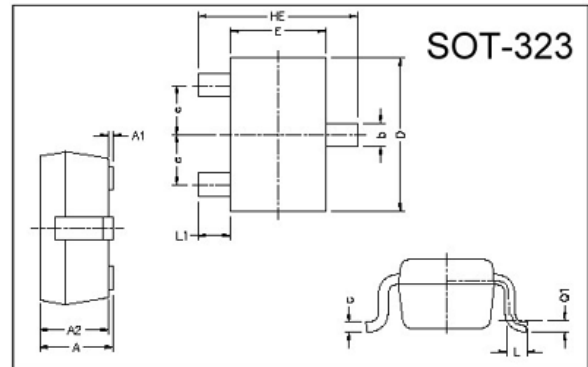
RoHS Compliant Product

Description

The BC817W is designed for switching and AF amplifier application, suitable for driver storages and low power output storages.

Features

- * For General AF Appliications
- * High Collector Current
- * High Current Gain
- * Low Collector-Emitter Saturation Voltage



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.80	1.10	L1	0.42 REF.	
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65 REF.	
HE	1.80	2.40	Q1	0.15 BSC.	

ABSOLUTE MAXIMUM RATINGS $T_a=25^{\circ}\text{C}$

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_{C}	Collector Current	800	mA
P_{D}	Total Power Dissipation	225	mW
$T_{\text{J}}, T_{\text{stg}}$	Junction and Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS $T_{\text{amb}}=25^{\circ}\text{C}$ unless otherwise specific

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	50	-	-	V	$I_{\text{C}}=100\mu\text{A}$
Collector-Emitter Breakdown Voltage	BV_{CEO}	45	-	-	V	$I_{\text{C}}=10\text{mA}$
Collector-Emitter Breakdown Voltage	BV_{CEO}	50	-	-	V	$I_{\text{C}}=100\mu\text{A}$
Emitter-Base Breakdown Voltage	BV_{EBO}	5	-	-	V	$I_{\text{E}}=100\mu\text{A}$
Collector-Base Cutoff Current	I_{CES}	-	-	100	nA	$V_{\text{CE}}=25\text{V}$
Emitter-Base Cutoff Current	I_{EBO}	-	-	100	nA	$V_{\text{EB}}=4\text{V}$
Collector Saturation Voltage	$*V_{\text{CE}}(\text{sat})$	-	-	700	mV	$I_{\text{C}}=500\text{mA}, I_{\text{B}}=50\text{mA}$
Base Saturation Voltage	$*V_{\text{BE}}(\text{sat})$	-	-	1.2	V	$V_{\text{CE}}=1\text{V}, I_{\text{C}}=100\text{mA}$
DC Current Gain	$*h_{\text{FE1}}$	100	-	630		$V_{\text{CE}}=1\text{V}, I_{\text{C}}=100\text{mA}$
Gain-Bandwidth Product	f_{T}	-	100	-	MHz	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=10\text{mA}, f=100\text{MHz}$
Output Capacitance	C_{ob}	-	-	12	pF	$V_{\text{CB}}=10\text{V}, f=1\text{MHz}, I_{\text{E}}=0\text{A}$

*Pulse width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification of h_{FE}

Rank	A	B	C
Range	100~250	160~400	250~630
Marking	8FA,6A	8FB,6B	8FC,6C

Characteristics Curve

