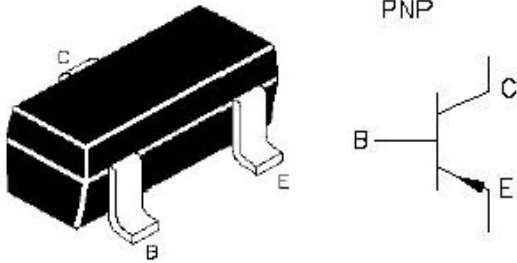


PNP SILICON EPITAXIAL PLANAR TRANSISTORS

BC807W / BC808W

SOT-323
Plastic Package



For General Purpose and Switching Applications

These transistors are subdivided into three groups -16 , -25 , -40 according to their current gain.

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

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	BC807W 50	V
		BC808W 30	
Collector Emitter Voltage	V_{CEO}	BC807W 45	V
		BC808W 25	
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Peak Collector Current	I_{CM}	1	A
Peak Base Current	I_{BM}	200	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	625 ¹⁾	K/W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +150	$^\circ\text{C}$

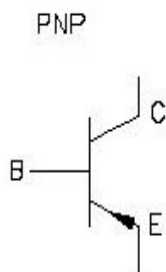
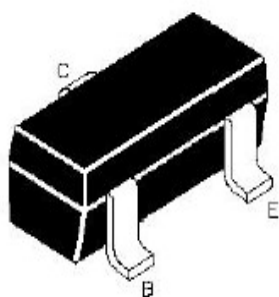
1) Transistor mounted on an FR4 printed -circuit board.

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Characterstics at $T_{amb} = 25^{\circ}\text{C}$

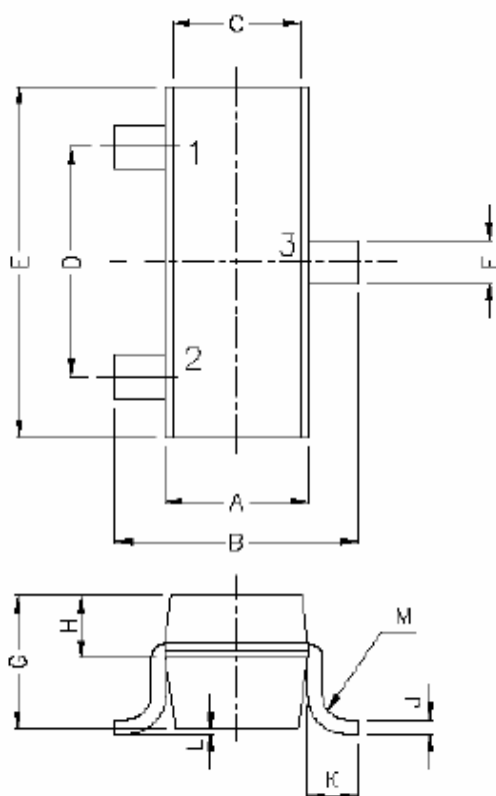
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
DC Current Gain	-16W h_{FE}	$V_{CE}=1\text{V}, I_C=100\text{ mA}$	100	250	-
	-25W h_{FE}		160	400	-
	-40W h_{FE}		250	600	-
	h_{FE}	$V_{CE}=1\text{V}, I_C=500\text{mA}$	40	-	-
Collector Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}$	50	-	V
			30		
Collector Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}$	45	-	V
			25		
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\text{ uA}$	5	-	V
Collector Emitter Saturation Voltage	V_{CEsat}	$I_C=500\text{ mA}, I_B=50\text{ mA}$	-	0.7	V
Base Emitter Voltage	$V_{BE(ON)}$	$I_C=500\text{ mA}, V_{CE}=1\text{V}$	-	1.2	V
Collector Cutoff Current	I_{CBO}	$V_{CB}=20\text{V}$	-	100	nA
		$V_{CB}=20\text{V}, T_j=150^{\circ}\text{C}$	-	5.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}$	-	100	nA
Transition Frequency	f_T	$V_{CE}=5\text{V}, I_C=10\text{mA},$	80	-	MHz
		$f=100\text{MHz}$			
Collector Capacitance	C_C	$V_{CB}=10\text{V}, f=1\text{MHz}$	-	10	pF

BC807W / BC808W

SOT-323

Plastic Package

PACKAGE SOT-323



DIM	MIN	MAX
A	1.25	1.35
B	2.02	2.18
C	1.20	1.30
D	1.25	1.35
E	2.10	2.20
F	0.27	0.33
G	0.95	1.00
H	0.35	4.00
J	0.09	0.15
K	0.25	0.33
L	0.00	0.10
M	R 0.15	R 0.20

DIMENSIONS ARE IN mm

PIN CONFIGURATION

1. BASE
2. EMITTER
3. COLLECTOR

PACKING :- 3K/REEL

Component Disposal Instructions

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.**
- 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).**

Disclaimer

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