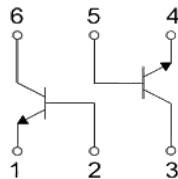
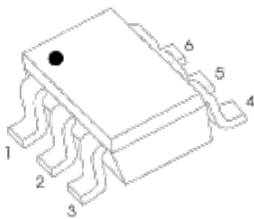


FEATURES

Two transistors in one package
Reduces number of components and board space
No mutual interference between the transistors

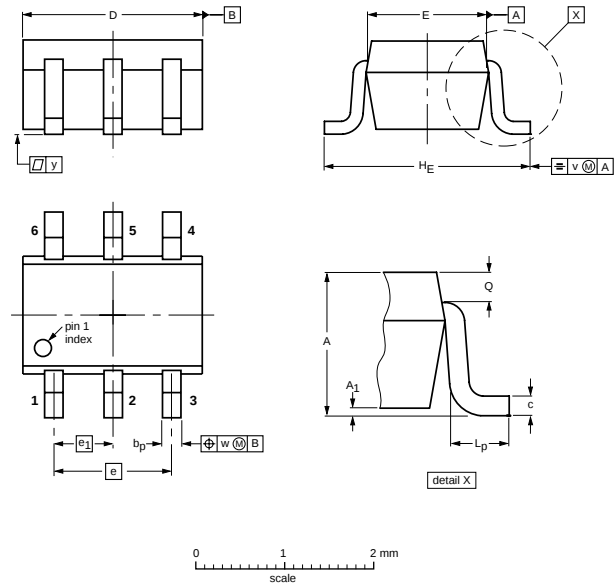
Device Marking

BC846ADW=1A; BC846BDW=1B;
BC847ADW=1E; BC847BDW=1F; BC847CDW=1G;
BC848ADW=1J; BC848BDW=1K; BC848CDW=1L



SOT-363

SOT-363



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	bp	c	D	E	e	e ₁	H _E	L _p	Q	v	w	y
mm	1.1 0.8	0.1	0.30 0.20	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.25 0.15	0.2	0.2	0.1

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	80	V
Collector Emitter Voltage	V _{CEO}	65	V
Emitter Base Voltage	V _{EBO}	6	V
Collector Current	I _C	100	mA
Peak Collector Current	I _{CM}	200	mA
Total Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

BC84XA/B/CDW

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 2\text{ mA}$	BC846A~BC848A h_{FE} BC846B~BC848B h_{FE} BC847C~BC848C h_{FE}	110 200 420	220 450 800	- - -
Collector Base Voltage at $I_C = 10\text{ }\mu\text{A}$	BC846 V_{CBO} BC847 BC848	80 50 30 30 50	- - - - -	V
Collector Emitter Voltage at $I_C = 10\text{ mA}$	BC846 V_{CEO} BC847 BC848	65 45 30	- - - -	V
Emitter Base Voltage at $I_E = 1\text{ }\mu\text{A}$	BC846 V_{EBO} BC847 BC848	6 6 5	- - -	V
Collector Base Cutoff Current at $V_{CB} = 30\text{ V}$	I_{CBO}	-	15	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	100	nA
Collector Emitter Saturation Voltage at $I_C = 10\text{ mA}$, $I_B = 0.5\text{ mA}$ $I_C = 100\text{ mA}$, $I_B = 5\text{ mA}$	$V_{CE(sat)}$	- -	0.25 0.6	V
Base Emitter Voltage at $V_{CE} = 5\text{ V}$, $I_C = 2\text{ mA}$ $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$	V_{BE}	0.58 -	0.7 0.77	V
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$, $f = 100\text{ MHz}$	f_T	100	-	MHz
Collector Output Capacitance at $V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$	C_{ob}	-	4.5	pF

RATING AND CHARACTERISTIC CURVES (BC84XA/B/CDW)

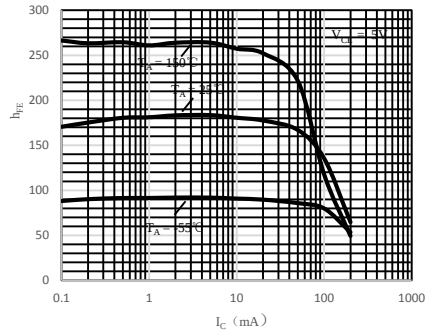


Fig 1 h_{FE} vs. I_C

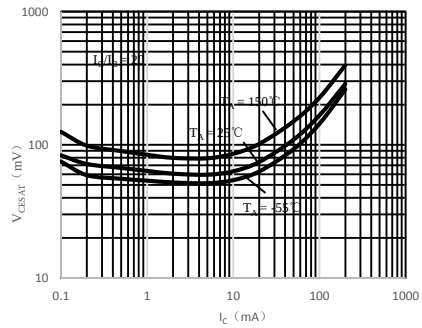


Fig 2 $V_{CE(sat)}$ vs. I_C

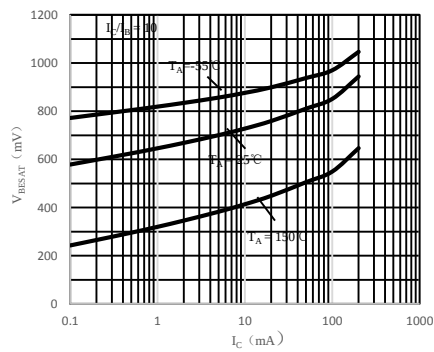


Fig 3 $V_{BE(sat)}$ vs. I_C

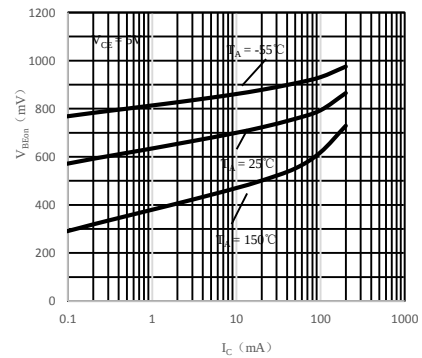


Fig 4 $V_{BE(on)}$ vs. I_C

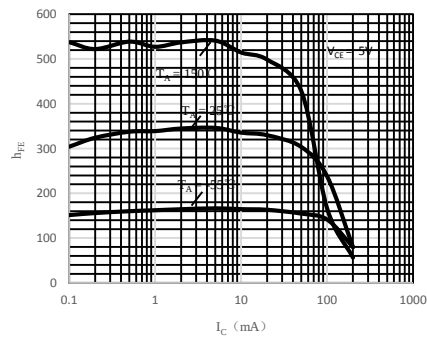


Fig 1 h_{FE} vs. I_C

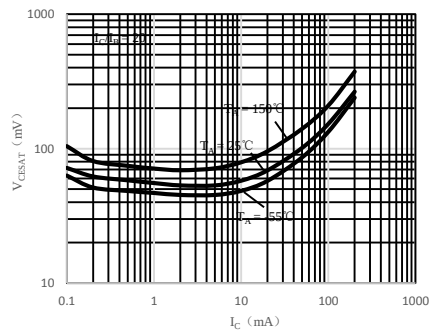


Fig 2 $V_{CE(sat)}$ vs. I_C

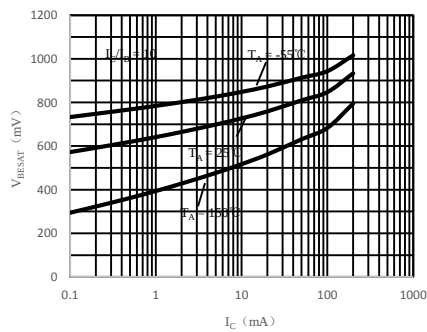


Fig 3 $V_{BE(sat)}$ vs. I_C

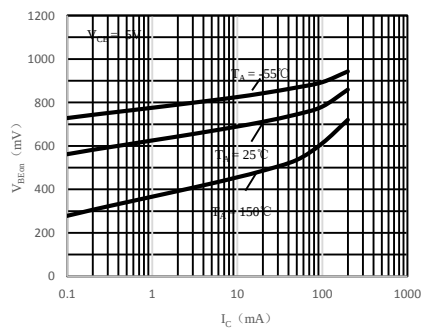


Fig 4 $V_{BE(on)}$ vs. I_C

RATING AND CHARACTERISTIC CURVES (BC84XA/B/CDW)

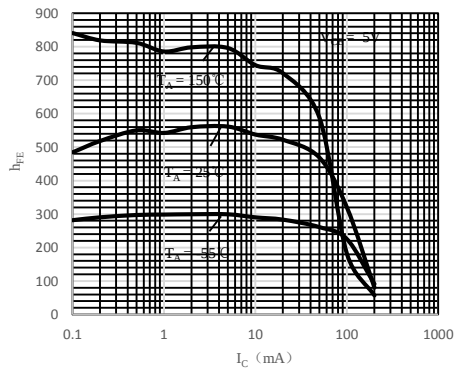


Fig 1 h_{FE} vs. I_C

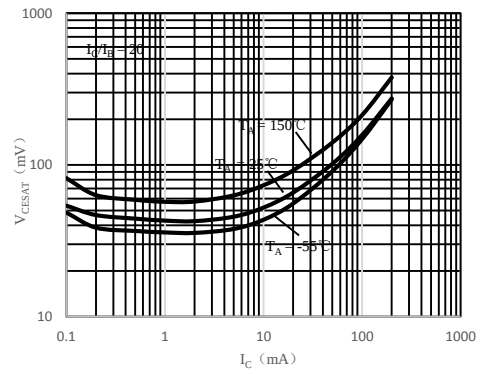


Fig 2 $V_{CE(sat)}$ vs. I_C

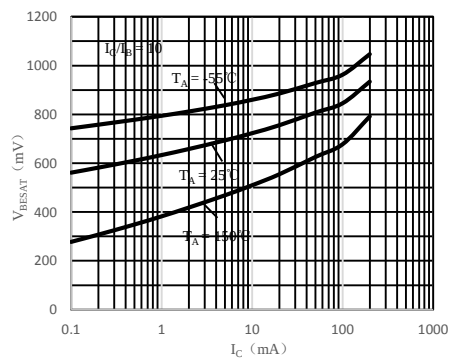


Fig 3 $V_{BE(sat)}$ vs. I_C

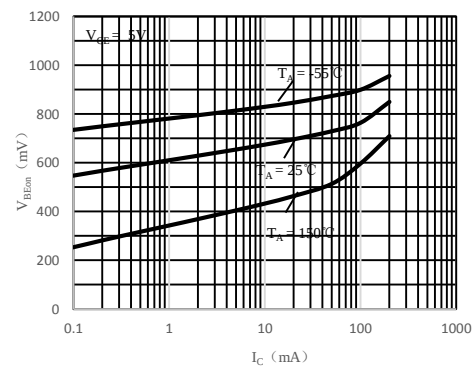


Fig 4 $V_{BE(ON)}$ vs. I_C