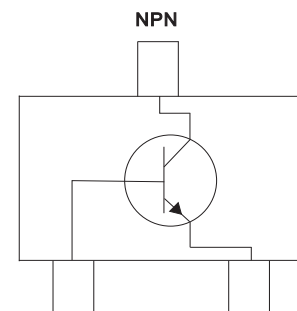




BC846,BC847,BC848,BC849,BC850 SERIES

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Collector - Emitter Breakdown Voltage BC846A/B BC847A/B/C,BC850B/C BC848A/B/C,BC849B/C	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	65 45 30	-	-	V
Collector - Base Breakdown Voltage BC846A/B BC847A/B/C,BC850B/C BC848A/B/C,BC849B/C	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	80 50 30	-	-	V
Emitter - Base Breakdown Voltage BC846A/B BC847A/B/C,BC850B/C BC848A/B/C,BC849B/C	$V_{(BR)EBO}$	$I_E=1\mu A, I_C=0$	6 6 5	-	-	V
Emitter-Base Cutoff Current	I_{EBO}	$V_{EB}=5$	-	-	100	nA
Collector-Base Cutoff Current	I_{CBO}	$V_{CB}=30V, I_E=0$ $V_{CB}=30V, I_E=0, T_J=150^\circ C$	-	-	15 5	nA μA
DC Current Gain BC846~BC848 Suffix "A" BC846~BC850 Suffix "B" BC847~BC850 Suffix "C"	h_{FE}	$I_C=10\mu A, V_{CE}=5V$	-	90 150 270	-	-
DC Current Gain BC846~BC848 Suffix "A" BC846~BC850 Suffix "B" BC847~BC850 Suffix "C"	h_{FE}	$I_C=2mA, V_{CE}=5V$	110 200 420	180 290 520	220 450 800	-
Collector - Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=10mA, I_B=0.5mA$ $I_C=100mA, I_B=5mA$	-	-	0.25 0.6	V
Base - Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=10mA, I_B=0.5mA$ $I_C=100mA, I_B=5mA$	-	0.7 0.9	-	V
Base - Emitter Voltage	$V_{BE(ON)}$	$I_C=2mA, V_{CE}=5V$ $I_C=10mA, V_{CE}=5V$	0.58 -	0.66 -	0.70 0.77	V
Collector - Base Capacitance	C_{CBO}	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	4.5	pF





BC846, BC847, BC848, BC849, BC850 SERIES

ELECTRICAL CHARACTERISTICS CURVE (BC846A, BC847A, BC848A)

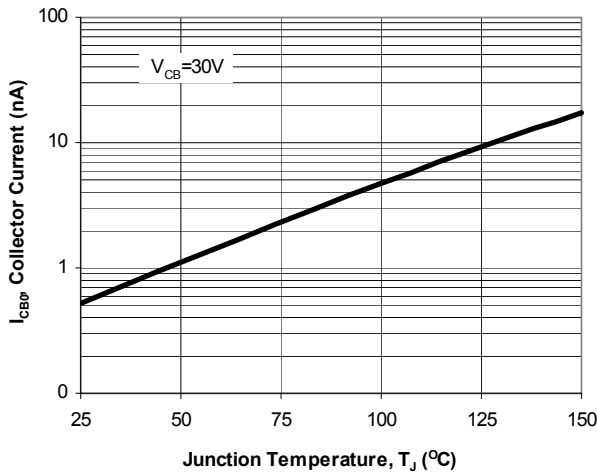


Fig. 1. Typical I_{CB0} vs. Junction Temperature

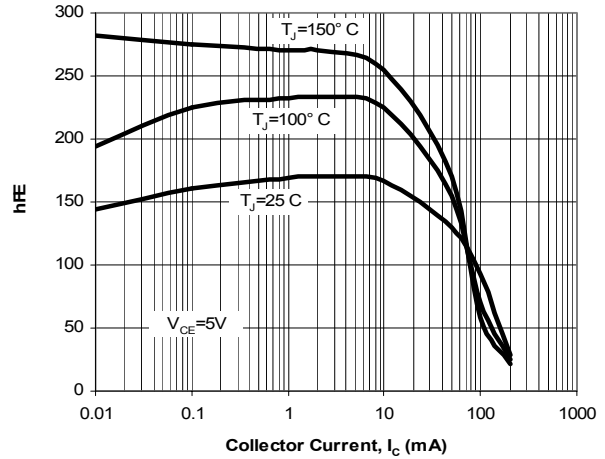


Fig. 2. Typical h_{FE} vs. Collector Current

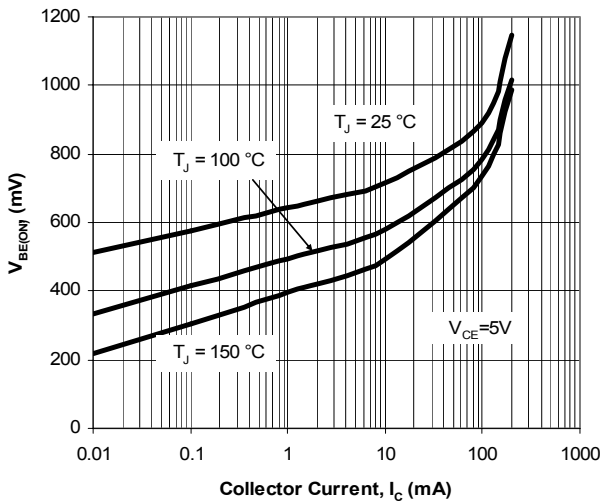


Fig. 3. Typical $V_{BE(ON)}$ vs. Collector Current

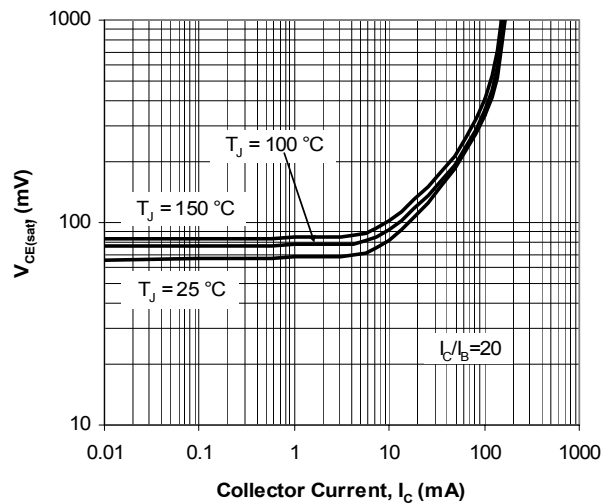


Fig. 4. Typical $V_{CE(SAT)}$ vs. Collector Current

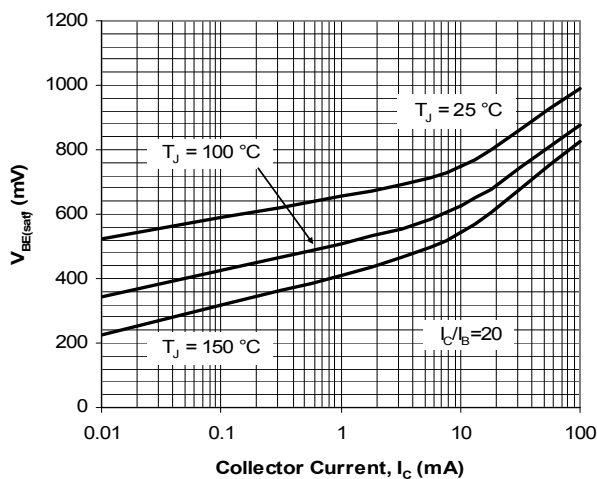


Fig. 5. Typical $V_{BE(SAT)}$ vs. Collector Current

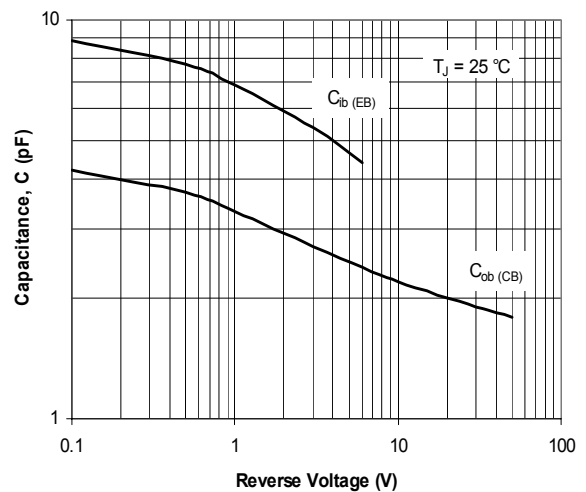


Fig. 6. Typical Capacitances vs. Reverse Voltage



BC846, BC847, BC848, BC849, BC850 SERIES

ELECTRICAL CHARACTERISTICS CURVE (BC846B, BC847B, BC848B, BC849B, BC850B)

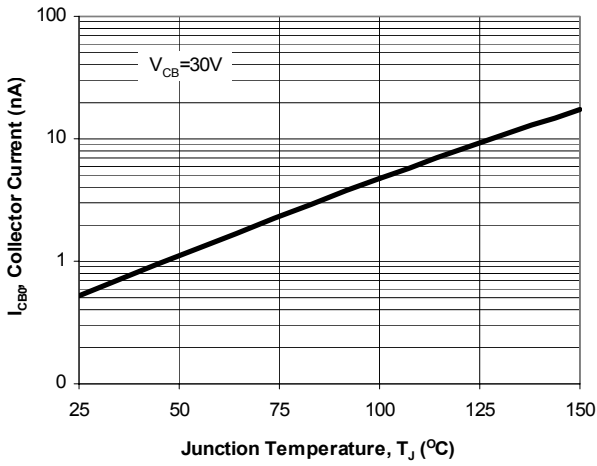


Fig. 1. Typical I_{CB0} vs. Junction Temperature

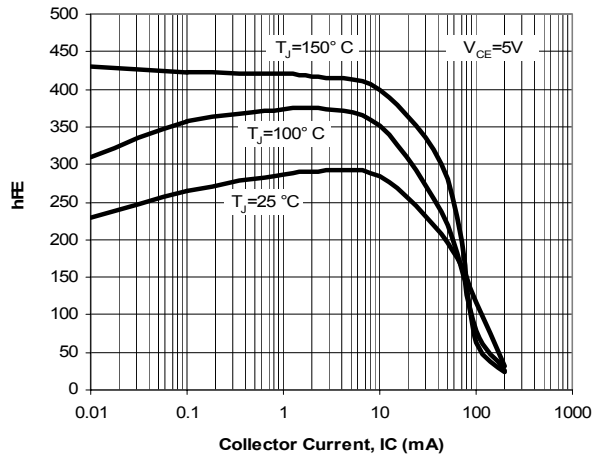


Fig. 2. Typical h_{FE} vs. Collector Current

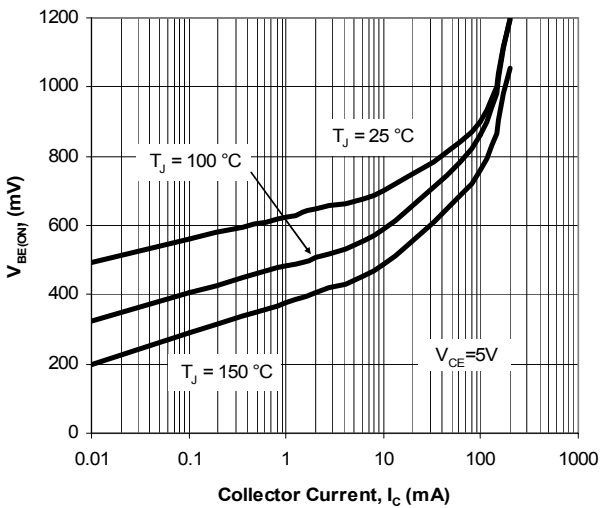


Fig. 3. Typical $V_{BE(ON)}$ vs. Collector Current

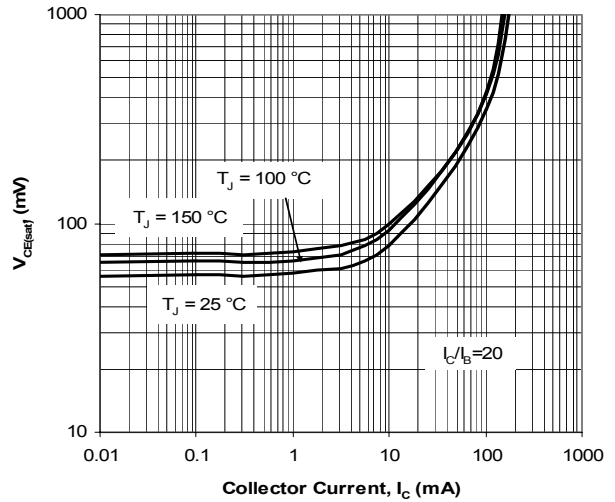


Fig. 4. Typical $V_{CE(SAT)}$ vs. Collector Current

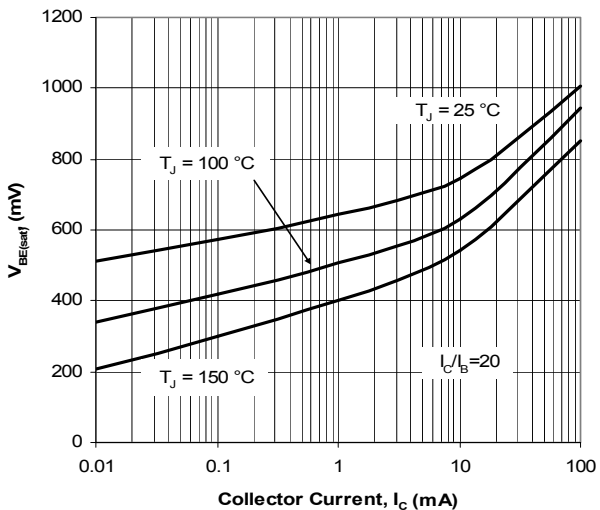


Fig. 5. Typical $V_{BE(SAT)}$ vs. Collector Current

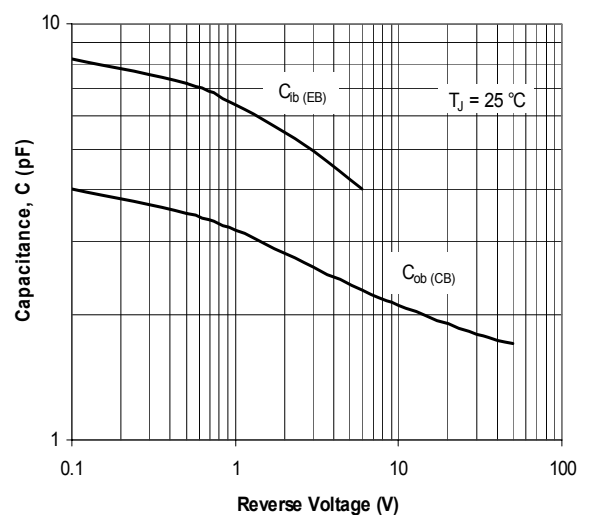


Fig. 6. Typical Capacitances vs. Reverse Voltage



BC846, BC847, BC848, BC849, BC850 SERIES

ELECTRICAL CHARACTERISTICS CURVE (BC847C, BC848C, BC849C, BC850C)

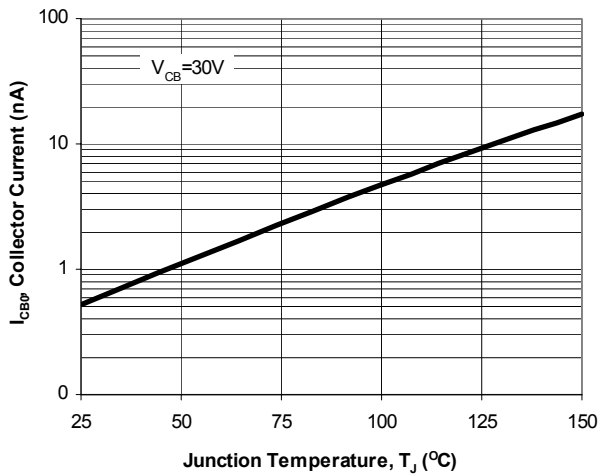


Fig. 1. Typical I_{CB0} vs. Junction Temperature

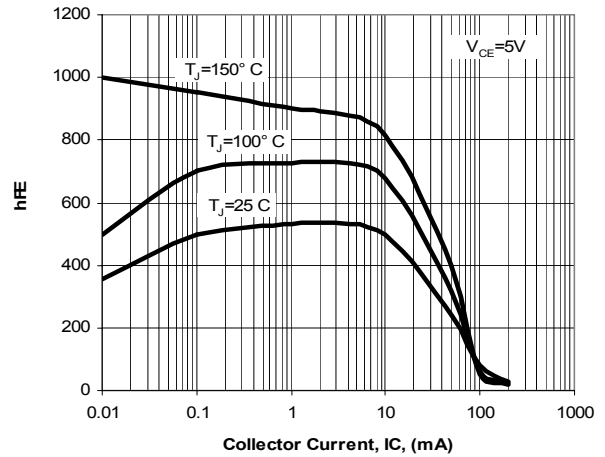


Fig. 2. Typical h_{FE} vs. Collector Current

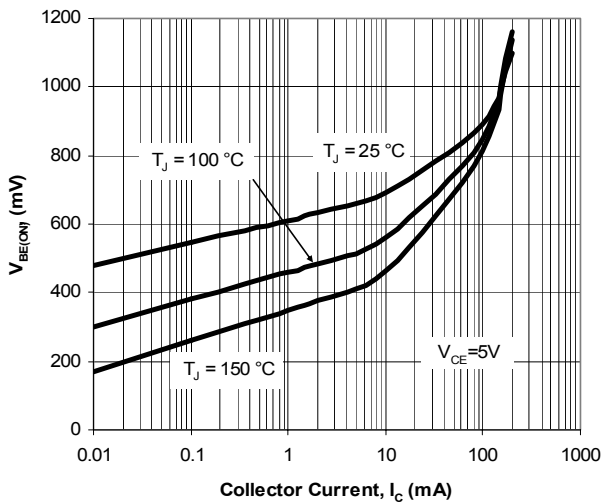


Fig. 3. Typical $V_{BE(ON)}$ vs. Collector Current

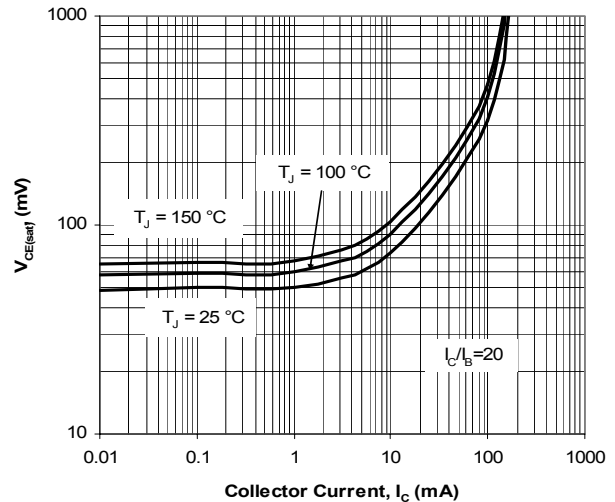


Fig. 4. Typical $V_{CE(SAT)}$ vs. Collector Current

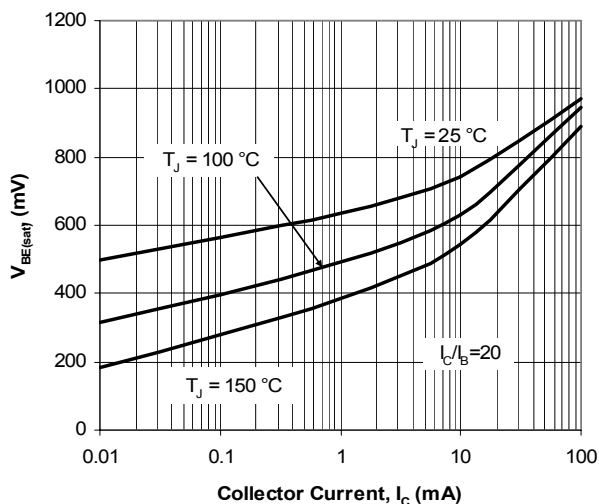


Fig. 5. Typical $V_{BE(SAT)}$ vs. Collector Current

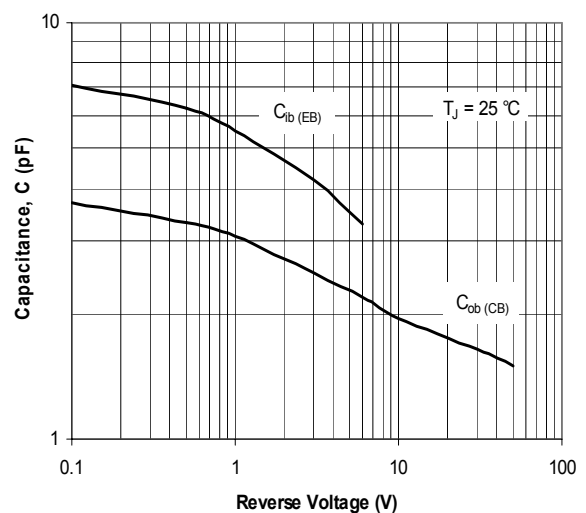


Fig. 6. Typical Capacitances vs. Reverse Voltage

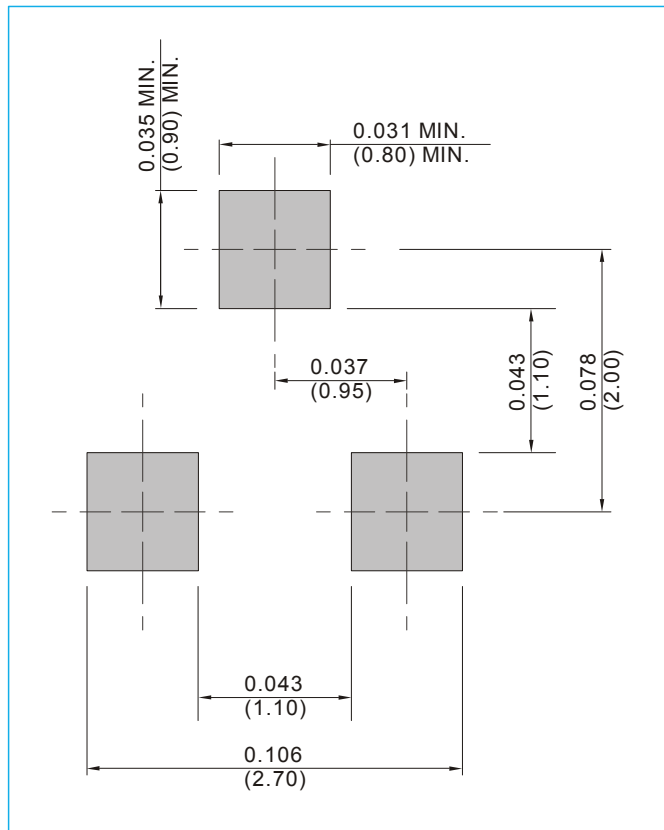


BC846,BC847,BC848,BC849,BC850 SERIES

MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



BC846,BC847,BC848,BC849,BC850 SERIES

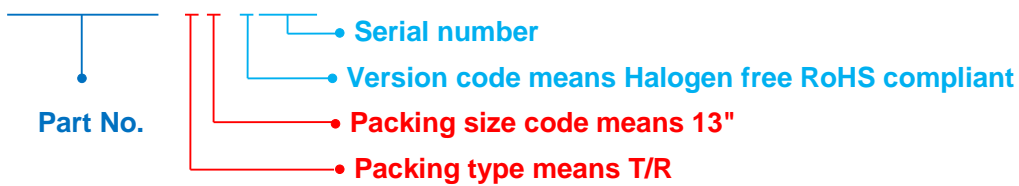
Part No._packing code_Version

BC846_R1_00001

BC846_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code X		Serial number XXXX
Packing type	1 st Code	Packing size code	2 nd Code	HSF Level	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	Halogen free RoHS compliant	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS compliant	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



BC846,BC847,BC848,BC849,BC850 SERIES

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