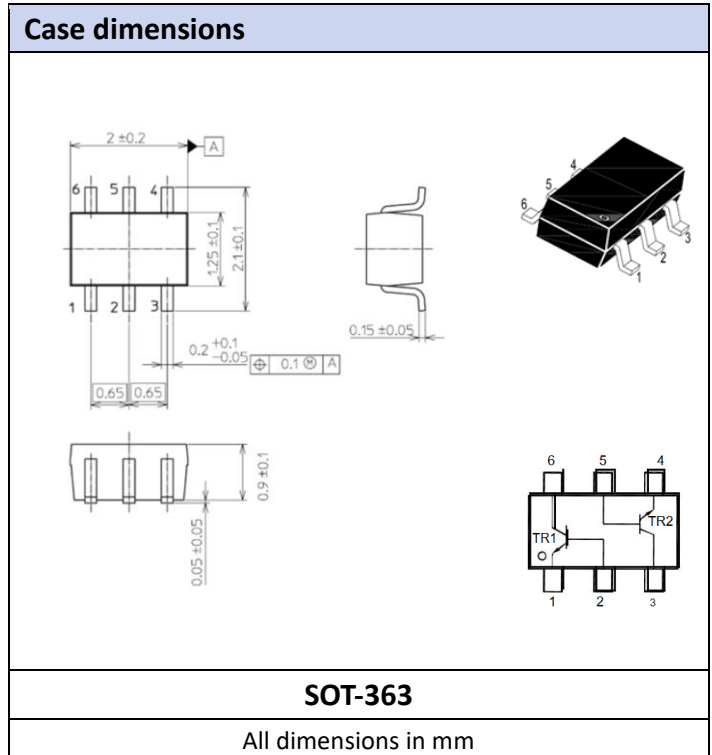


NPN Transistor

Primary characteristics				
Symbol	Parameter		Value	Unit
V_{CBO}	Collector-base voltage	BC846	80	V
		BC847	50	
		BC848	30	
V_{CEO}	Collector-emitter voltage	BC846	65	V
		BC847	45	
		BC848	30	
V_{EBO}	Emitter-base voltage		6	V
P_D	Total power dissipation		200	mW



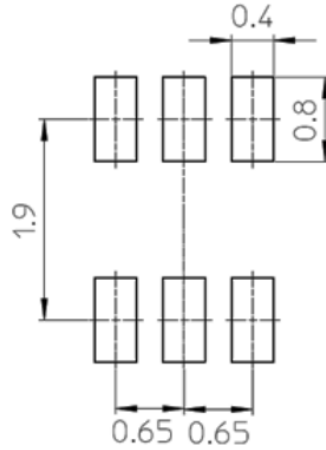
Features

- **SOT-363** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Epitaxial planar die construction
- Complementary **PNP** type available (BC856 ~ BC858)
- For switching and AF amplifier applications

Absolute maximum ratings (T _a = 25°C)				
Parameter		Symbol	Value	Unit
Collector-base voltage	BC846	V _{CB0}	80	V
	BC847		50	V
	BC848		30	V
Collector-emitter voltage	BC846	V _{CEO}	65	V
	BC847	V _{CEO}	45	V
	BC848	V _{CEO}	30	V
Emitter-base voltage		V _{EBO}	6	V
Collector current		I _C	100	mA
Power dissipation		P _D	200	mW
Thermal resistance junction to ambient		R _{θJA}	625	°C/W
Junction temperature		T _J	150	°C
Storage temperature range		T _{STG}	-55 ~ 150	

Characteristics (T _a = 25°C)						
Parameter	Symbol	Test conditions	Value			Unit
			Min.	Typ.	Max.	
DC current gain	h _{FE}	V _{CE} =5.0V, I _C =2.0mA	110	-	800	-
Collector-base cutoff current	BC846 BC847 BC848	I _{CBO}	-	-	100	nA
		V _{CB} =70V, I _E =0				
		V _{CB} =50V, I _E =0				
		V _{CB} =30V, I _E =0				
Emitter cutoff current	I _{EBO}	V _{EB} =5.0V, I _C =0	-	-	100	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =5.0mA	-	-	500	mV
Base-emitter voltage	V _{BE}	I _C =100mA I _B =5mA	-	-	1.1	V
Transition frequency	f _T	V _{CE} =5V, I _C =10mA	100	-	-	MHz
Collector output capacitance	C _{OB}	V _{CB} =10V; f=100MHz	-	-	4.5	pF

Suggested soldering pad layout



SOT-363

Ordering information

Part Number	Package	Shipping Quantity	Dimensions
BC847ADW ~ BC847CDW	SOT-363	3000 pcs / 7" reel	---

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