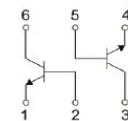
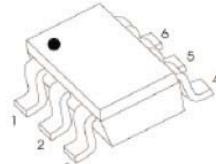


Features

- This device is designed for general purpose amplifier applications
- High Stability and High Reliability

Mechanical Data

- SOT-363 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

Marking: 4Ft
SOT-363

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	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-Continuous	I _C	100	mA
Collector Power Dissipation	P _C	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55+150	°C
Thermal resistance From junction to ambient	R _{θJA}	625	°C/W

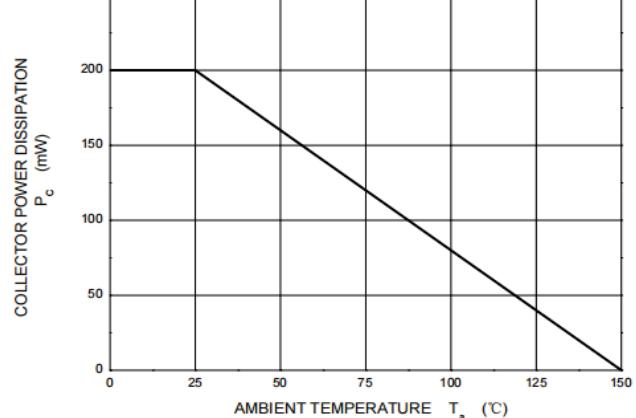
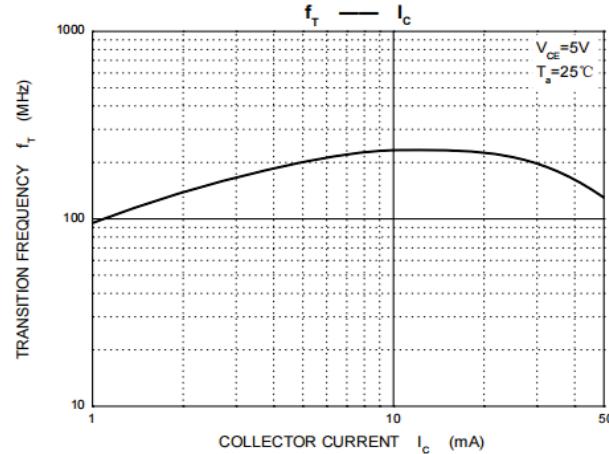
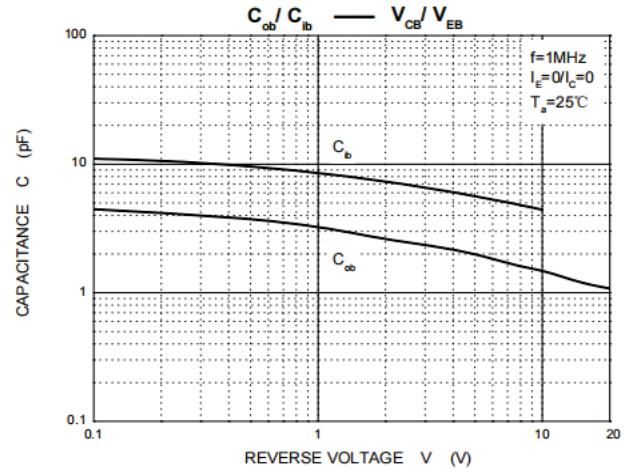
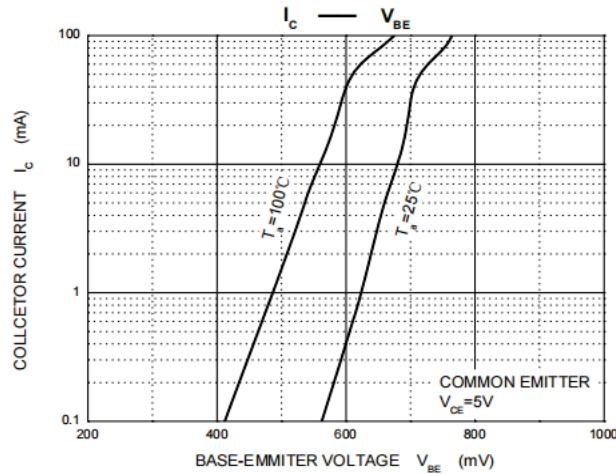
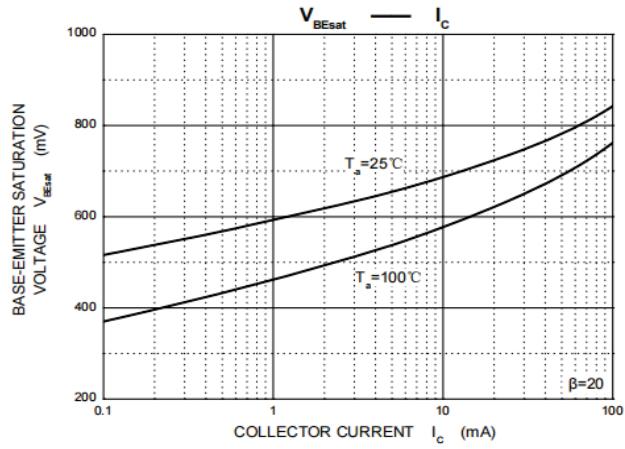
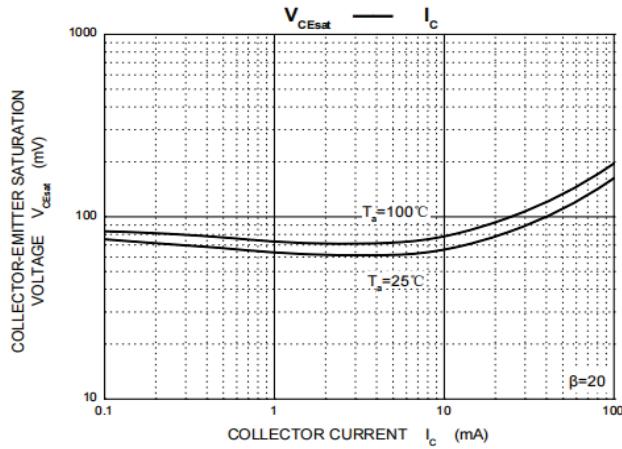
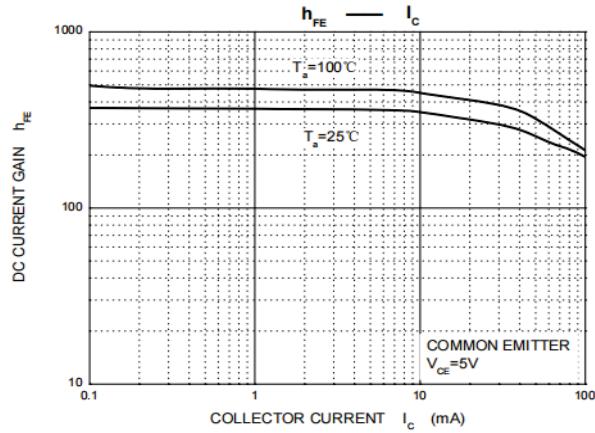
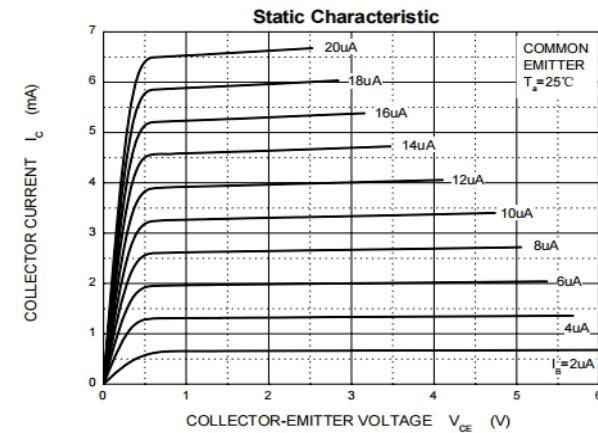
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10uA, I _E =0	80			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	65			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10uA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} =30V, I _E =0			15	nA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			500	nA
DC current gain	h _{FE}	V _{CE} =5V, I _C =2mA	200		450	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =0.5mA I _C =100mA, I _B =5mA			0.1 0.3	V
Base -emitter voltage	V _{BE}	V _{CE} =5V, I _C =2mA V _{CE} =5V, I _C =10mA	0.58		0.70 0.77	V
Transition frequency	f _T	V _{CE} =5V, I _C =20mA, f=100MHz		200		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		2		pF

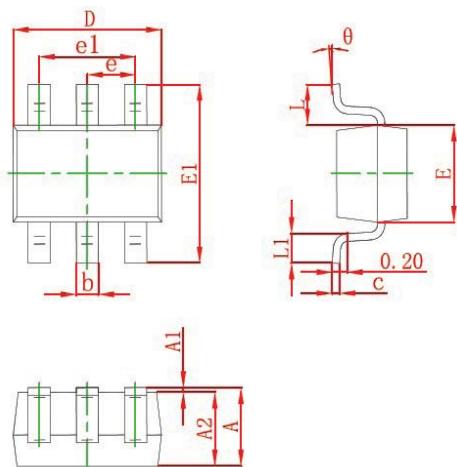
*Pulse test: pulse width≤300us,duty cycle≤2.0%

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RATING AND CHARACTERISTICS CURVES (BC846S)

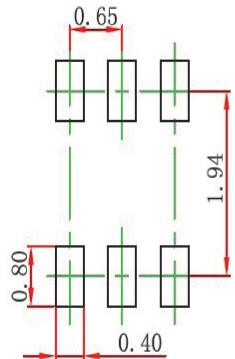


SOT-363 PACKAGE OUTLINE Plastic surface mounted package



Symbol	Dimensions In Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.100	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.400
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°

Recommended land dimensions for SOT-363 diode. Electrode patterns for PCBs



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOT363	-T	3,000	15,000	---	---	178	390*205*31	120,000	---

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