

DUAL TRANSISTOR(NPN+NPN)

Features

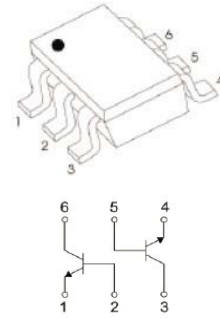
- This device is designed for general purpose amplifier applications
- High Stability and High Reliability

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.)

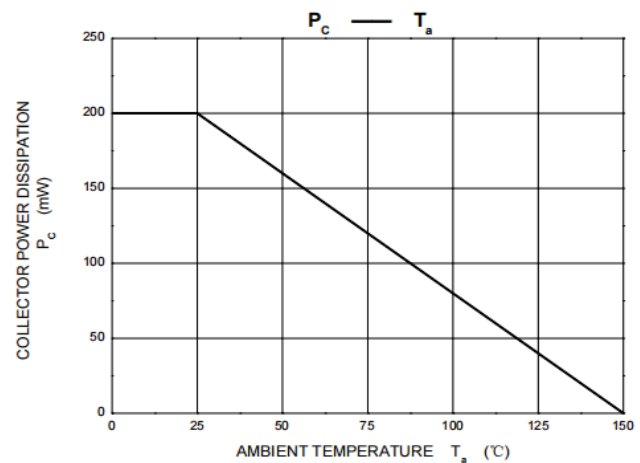
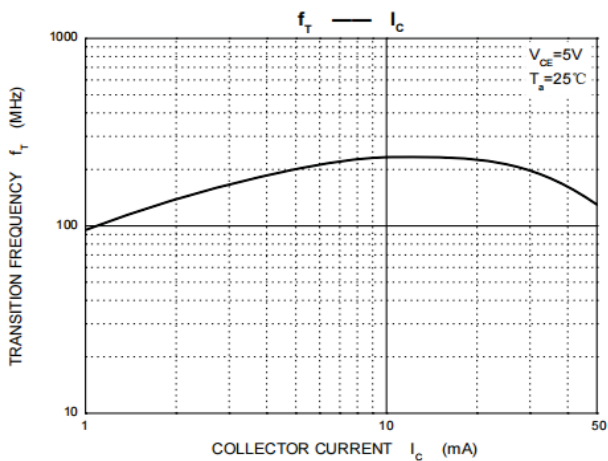
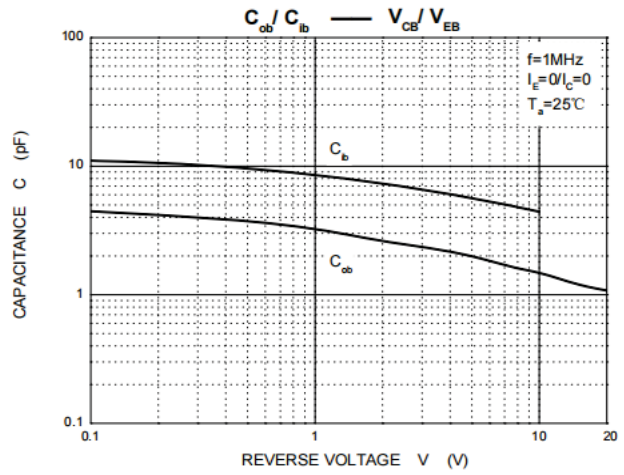
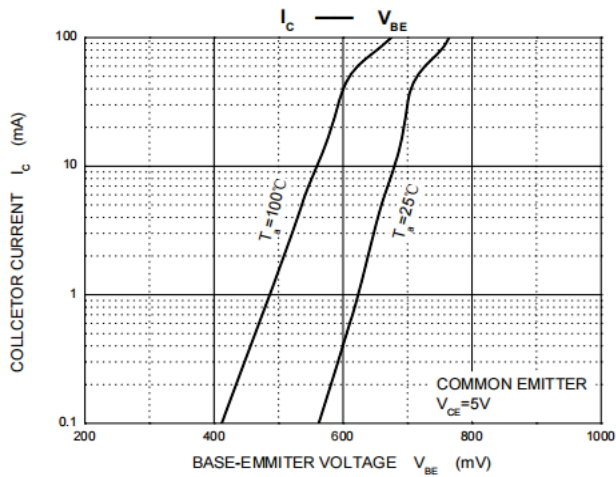
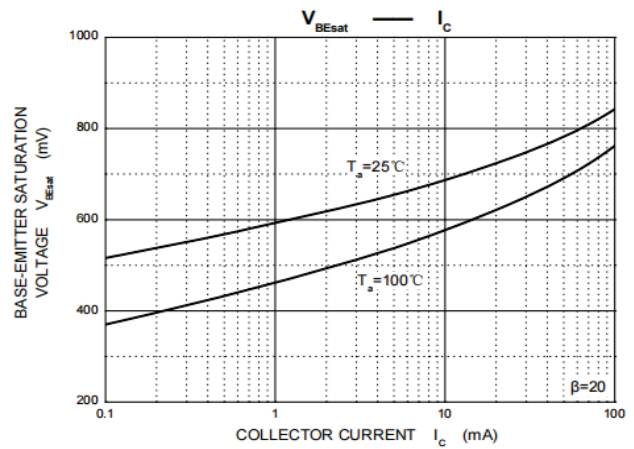
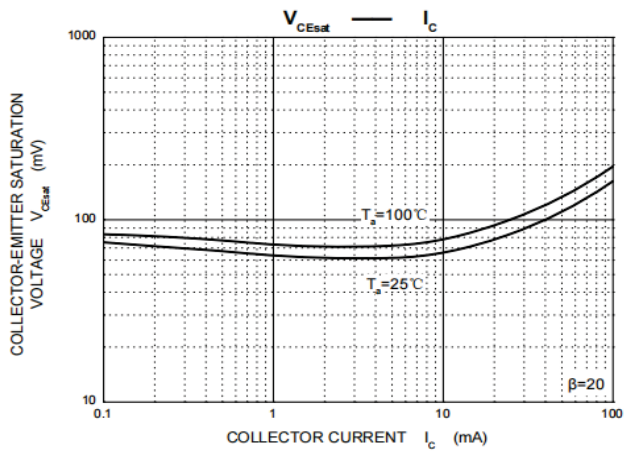
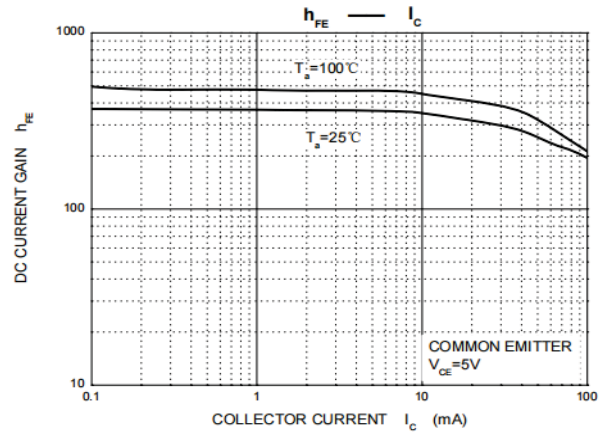
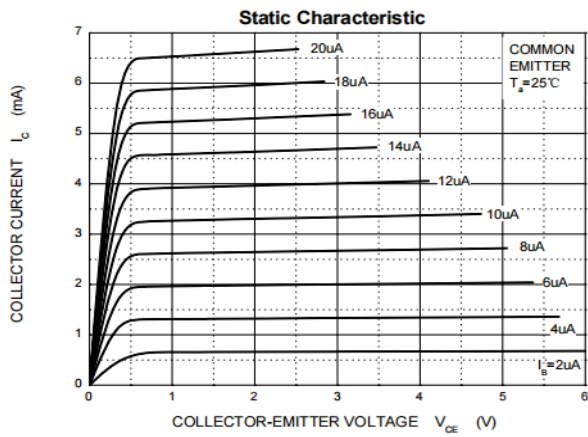
Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	65	V
Emitter -Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55-+150	°C
Thermal resistance From junction to ambient	$R_{\theta JA}$	625	°C/W

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

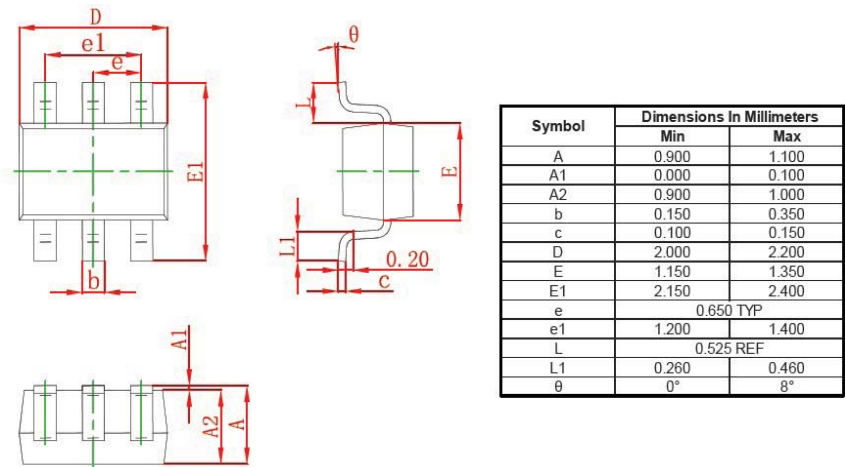
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V(BR)CBO$	$I_C=10\mu A, I_E=0$	80			V
Collector-emitter breakdown voltage	$V(BR)CEO$	$I_C=1mA, I_B=0$	65			V
Emitter-base breakdown voltage	$V(BR)EBO$	$I_E=10\mu A, I_C=0$	6			V
Collector cut-off current	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	$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$			0.1	V
		$I_C=100mA, I_B=5mA$			0.3	V
Base -emitter voltage	V_{BE}	$V_{CE}=5V, I_C=2mA$	0.58		0.70	V
		$V_{CE}=5V, I_C=10mA$			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 $\leq 300\mu s$, duty cycle $\leq 2.0\%$

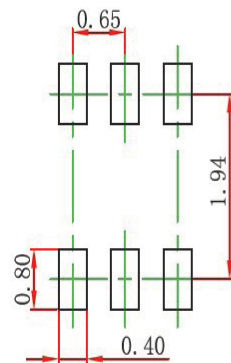
RATING AND CHARACTERISTICS CURVES(BC846S)



SOT-363 PACKAGE OUTLINE Plastic surface mounted package



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



- Note:
1. Controlling dimension; in millimeters.
 2. General tolerance; $\pm 0.05\text{mm}$.
 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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