



DUAL TRANSISTOR(NPN+NPN)

BC847BS

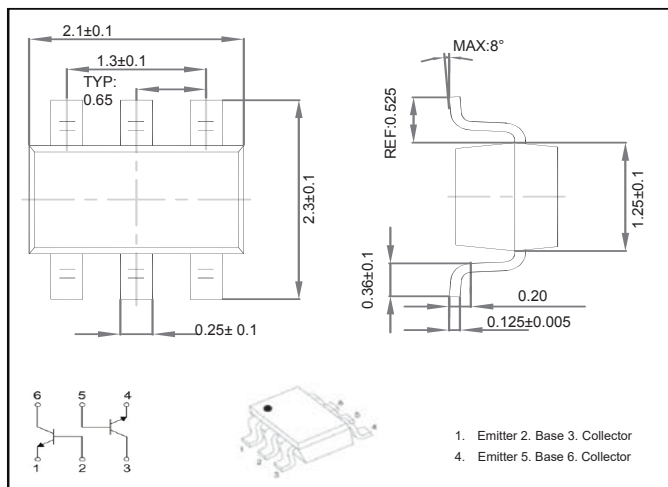
SOT-363 Plastic-Encapsulate Transistors

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



MAXIMUM RATINGS AND CHARACTERISTICS @

25°C Ambient Temperature (unless otherwise noted)

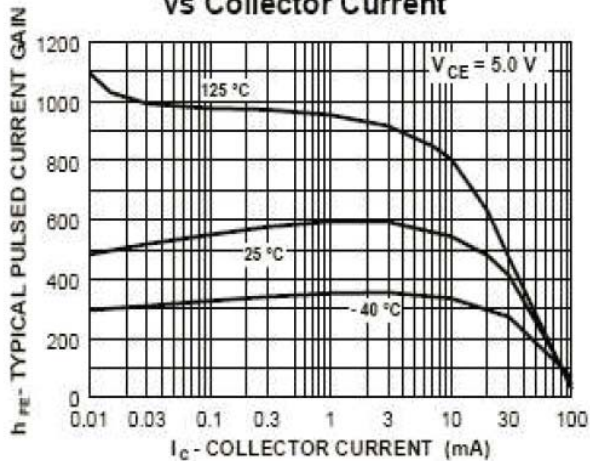
Parameters	Symbol	Value	Unit
Collector-Base Voltage	VCBO	50	V
Collector-Emitter Voltage	VCEO	45	V
Emitter -Base Voltage	VEBO	6	V
Collector Current-Continuous	IC	100	mA
Collector Power Dissipation	PC	200	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55-+150	°C
Thermal resistance From junction to ambient	RθJA	625	°C/W

Electrical Specification(T_A=25°C unless otherwise specified)

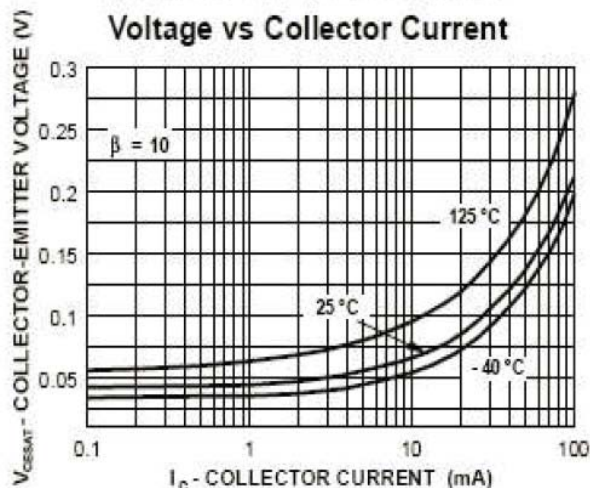
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	V(BR)CBO	IC=10uA, IE=0	50			V
Collector-emitter breakdown voltage	V(BR)CEO	IC=1mA, IB=0	45			V
Emitter-base breakdown voltage	V(BR)EBO	IE=10uA, IC=0	6			V
Collector cut-off current	ICBO	VCB=30V, IE=0			15	nA
Emitter cut-off current	IEBO	VEB=4V, IC=0			15	nA
DC current gain	hFE	VCE=5V, IC=2mA	200		450	
Collector-emitter saturation voltage	VCE(sat)	IC=10mA, IB=0.5mA			0.25	V
		IC=100mA, IB=5mA			0.65	V
Base -emitter voltage	VBE	VCE=5V, IC=2mA	0.58		0.70	V
		VCE=5V, IC=10mA			0.77	V
Transition frequency	fT	VCE=5V, IC=20mA, f=100MHz		200		MHz
Collector output capacitance	Cob	VCB=10V, IE=0, f=1MHz		2		pF

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

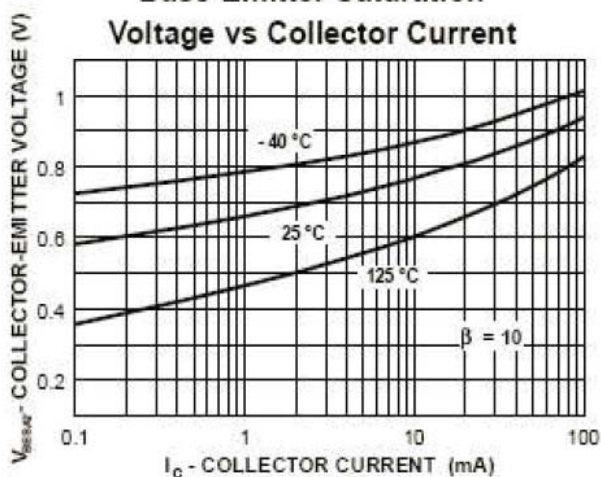
**Typical Pulsed Current Gain
vs Collector Current**



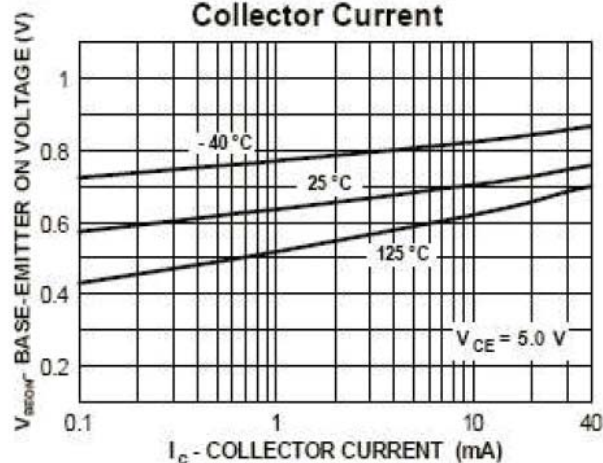
**Collector-Emitter Saturation
Voltage vs Collector Current**



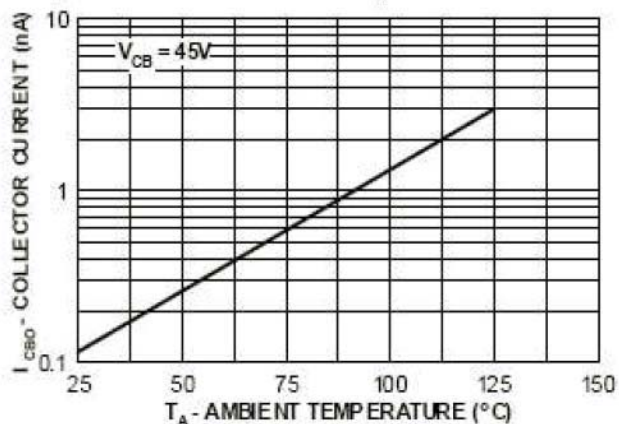
**Base-Emitter Saturation
Voltage vs Collector Current**



**Base-Emitter ON Voltage vs
Collector Current**



**Collector-Cutoff Current
vs Ambient Temperature**



**Input and Output Capacitance
vs Reverse Bias Voltage**

