



Micro Commercial Components



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BC847BS

Dual NPN Small
Signal Transistor
300mW

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
Ideally Suited for Automatic Insertion
Ultra-Small Surface Mount Package
For Switching and AF Amplifier Applications
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1
Marking:1C

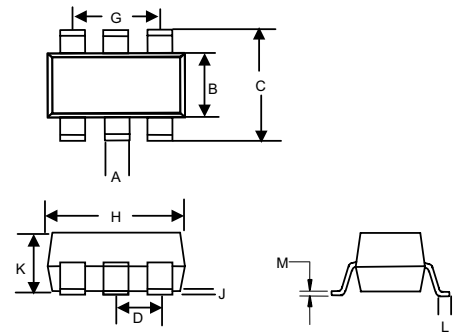
Mechanical Data

- Case: SOT-363, Molded Plastic
Polarity: See Diagram

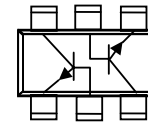
Maximum Ratings @ 25°C Unless Otherwise Specified

Table with 4 columns: Symbol, Parameter, Value, Units. Rows include OFF CHARACTERISTICS, V(BR)CEO, V(BR)CBO, V(BR)EBO, IC, ICM, Pd, and TJ, TSTG.

SOT-363



DIMENSIONS table with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A through M.



# BC847BS



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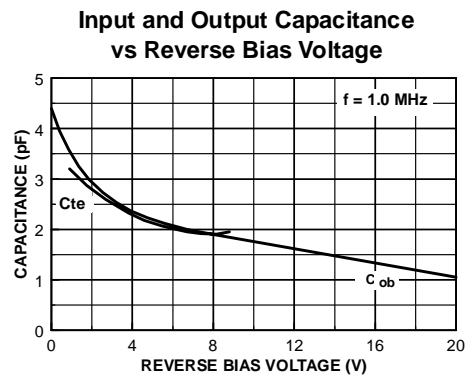
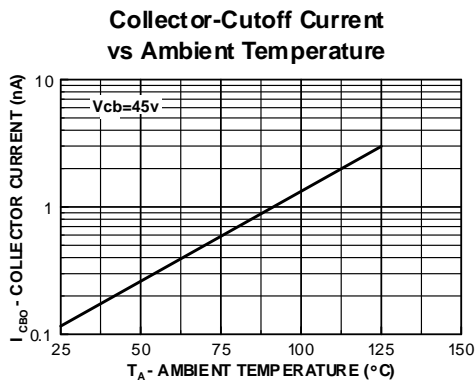
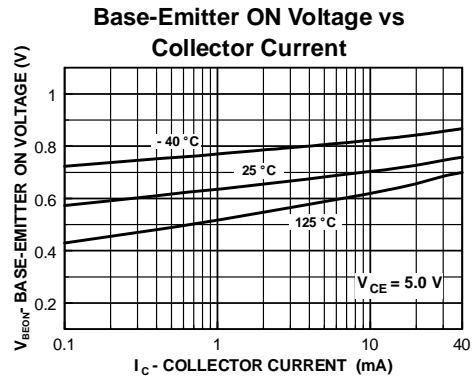
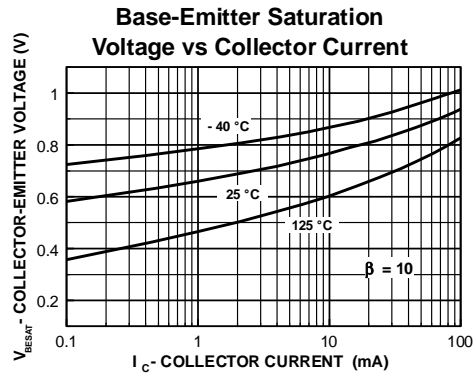
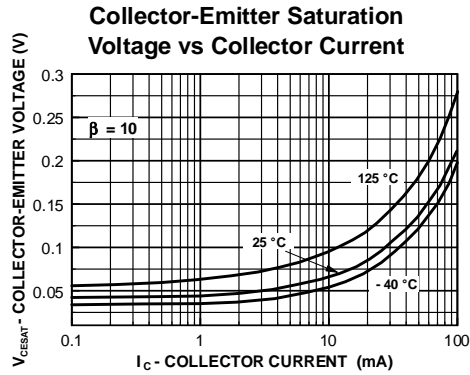
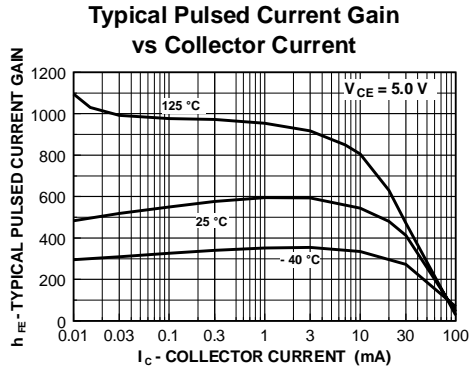
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units	Test Condition
<b>OFF CHARACTERISTICS</b>						
$h_{FE}$	DC Current Gain	200	---	450	---	$V_{CE}=5.0V, I_C=2.0mA$
$V_{CE(SAT)}$	Collector-Emitter Saturation Voltage	---	---	250 650	mV	$I_C=10mA, I_B=0.5mA$ $I_C=100mA, I_B=5.0mA$
$V_{BE(ON)}$	Base-Emitter Voltage	580	665	700	mV	$V_{CE}=5.0V, I_C=2.0mA$
$I_{CBO}$	Collector-Cutoff Current	---	---	15	nA	$V_{CB}=30V, I_E=0$
$f_T$	Gain Bandwidth Product	---	200	---	MHz	$V_{CE}=5.0V, I_C=10mA,$ $f=100MHz$
$C_{OB}$	Collector-output Capacitance	---	2	---	pF	$V_{CB}=10V, f=1.0MHz$

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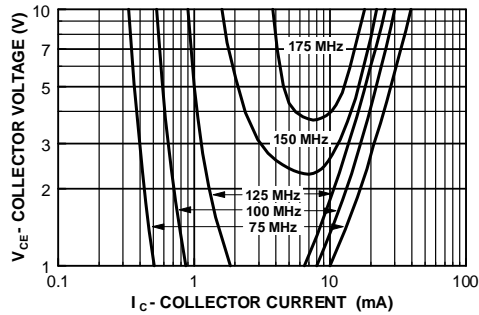


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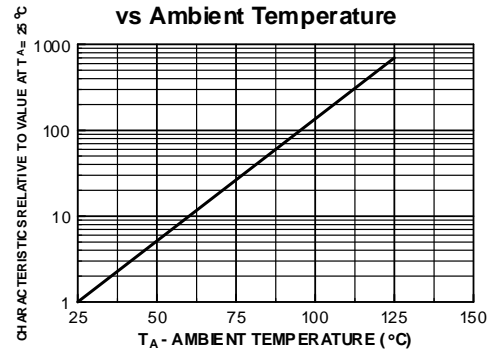


[www.mccsemi.com](http://www.mccsemi.com)

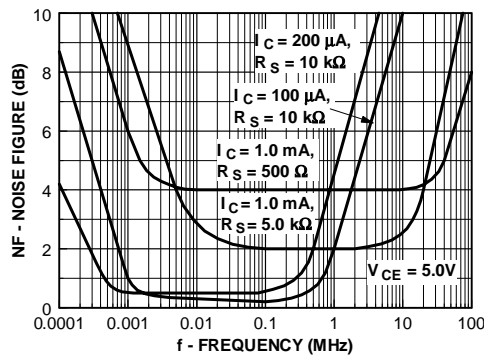
**Contours of Constant Gain Bandwidth Product ( $f_T$ )**



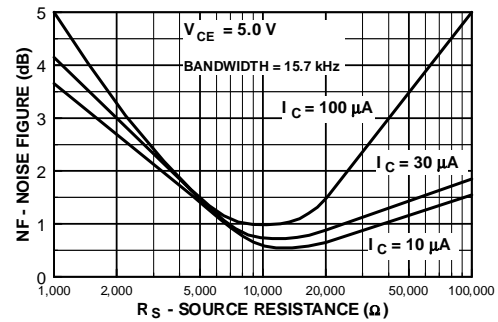
**Normalized Collector-Cutoff Current vs Ambient Temperature**



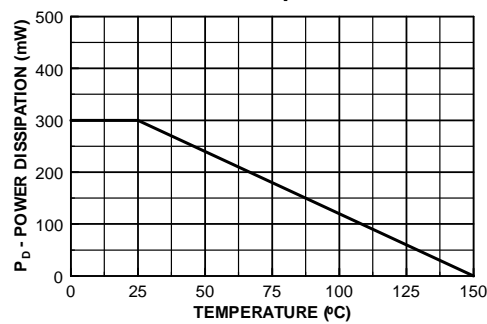
**Noise Figure vs Frequency**



**Wideband Noise Frequency vs Source Resistance**



**Power Dissipation vs Ambient Temperature**





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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

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