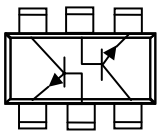
Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BC846S
BC846BS

Dual NPN Small Signal Transistor 200mW

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Ideally Suited for Automatic Insertion
- Ultra-Small Surface Mount Package
- For Switching and AF Amplifier Applications
- Marking: 4Ft
- Halogen free available upon request by adding suffix "-HF"



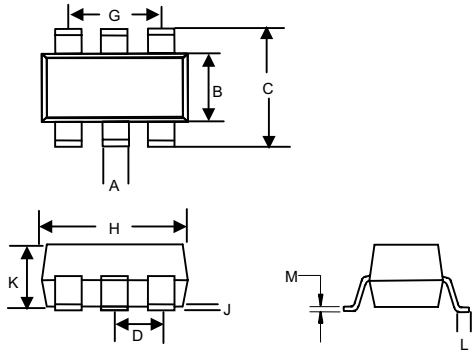
Mechanical Data

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

Maximum Ratings @ 25℃ Unless Otherwise Specified

Symbol	Parameter	Value	Units
OFF CHARACTERISTICS			
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	65	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	80	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage	6.0	Vdc
I_C	Collector Current	100	mAdc
P_d	Power Dissipation @ T_A=25℃	200	mw
T_J, T_{STG}	Operating & Storage Temperature	-55~+150	℃

SOT-363

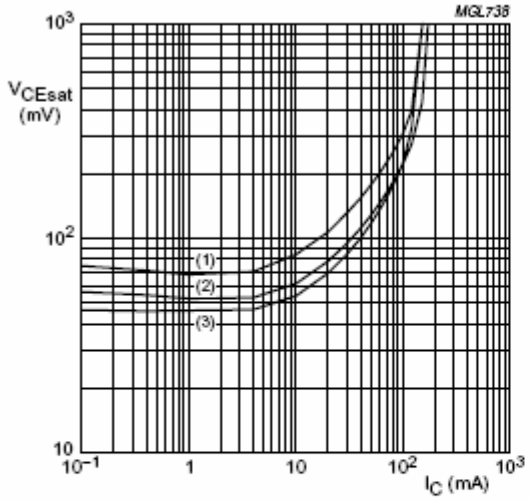


DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.006	.014	0.15	0.35	
B	.045	.053	1.15	1.35	
C	.085	.096	2.15	2.45	
D	.026		0.65Nominal		
G	.047	.055	1.20	1.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
M	.003	.006	0.08	0.15	

Electrical Characteristics @ 25℃ Unless Otherwise Specified

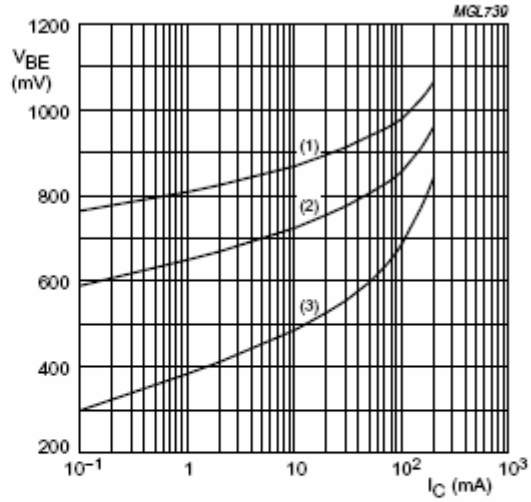
Symbol	Parameter		Min	Typ	Max	Units	Test Condition
OFF CHARACTERISTICS							
h_{FE}	DC Current Gain	BC846S BC846BS	110 200	--- ---	--- 450	--- ---	V_{CE}=5.0V, I_C=2mA
$V_{CE(SAT)}$	Collector-Emitter Saturation Voltage		---	--- ---	100 300	mV	I_C=10mA, I_B=0.5mA I_C=100mA, I_B=5.0mA
$V_{BE(ON)}$	Base-Emitter Voltage		---	700	---	mV	
I_{CBO}	Collector-Cutoff Current		---	---	15	nA	V_{CB}=30V, I_E=0
f_T	Gain Bandwidth Product		---	100	---	MHz	V_{CE}=5.0V, I_C=10mA, f=100MHz
C_{OB}	Collector-output Capacitance		---	1.5	---	pF	V_{CB}=10V, f=1.0MHz

Typical Characteristics



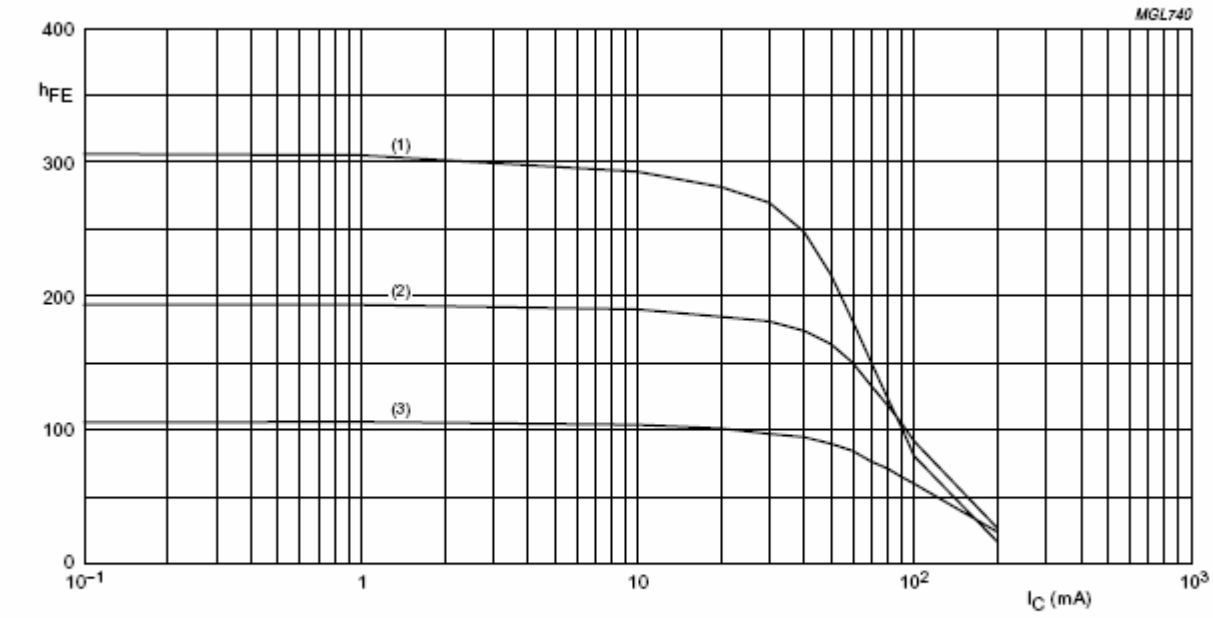
$I_C/I_B = 20$.
(1) $T_{amb} = 150$ °C.
(2) $T_{amb} = 25$ °C.
(3) $T_{amb} = -55$ °C.

Fig.2 Collector-emitter saturation voltage as a function of collector current; typical values.



$V_{CE} = 5$ V.
(1) $T_{amb} = -55$ °C.
(2) $T_{amb} = 25$ °C.
(3) $T_{amb} = 150$ °C.

Fig.3 Base-emitter voltage as a function of collector current; typical values.



$V_{CE} = 5$ V.
(1) $T_{amb} = 150$ °C.
(2) $T_{amb} = 25$ °C.
(3) $T_{amb} = -55$ °C.

Fig.4 DC current gain as a function of collector current; typical values.

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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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