



Micro Commercial Components



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BC857S

Features

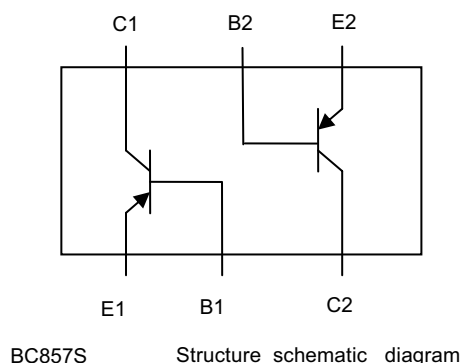
- Halogen free available upon request by adding suffix "-HF"
- # Multi-chip Transistor
- # Ultra-Small Surface Mount Package
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Mechanical Data

- # Case: SOT-363
- Marking: 3C

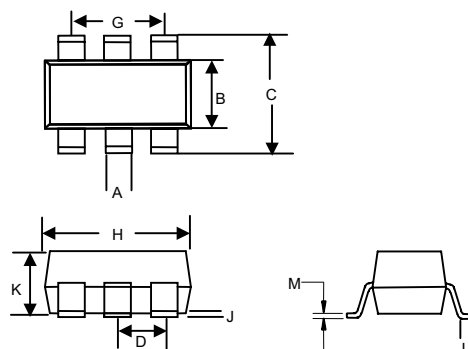
Maximum Ratings @ 25°C Unless Otherwise Specified

Symbol	Parameter	Value	Units
OFF CHARACTERISTICS			
I_{CM}	Peak Collector Current	-200	mA
$V(BR)CBO$	Collector-base Voltage	-50	V
P_d	Power Dissipation @ $T_A=25^\circ C$	300	mW
T_J, T_{STG}	Operating & Storage Temperature	-55~+150	$^\circ C$



PNP Plastic-Encapsulate Transistors 300mW

SOT-363

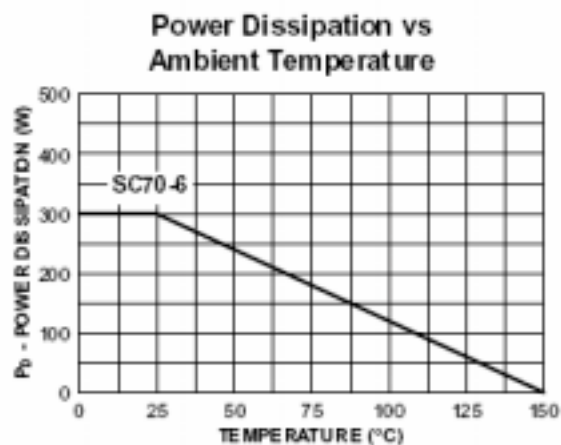
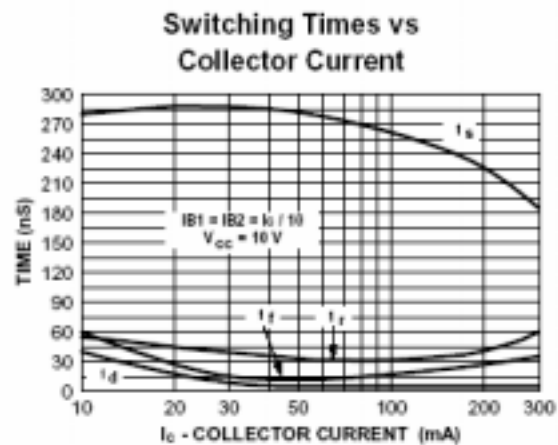
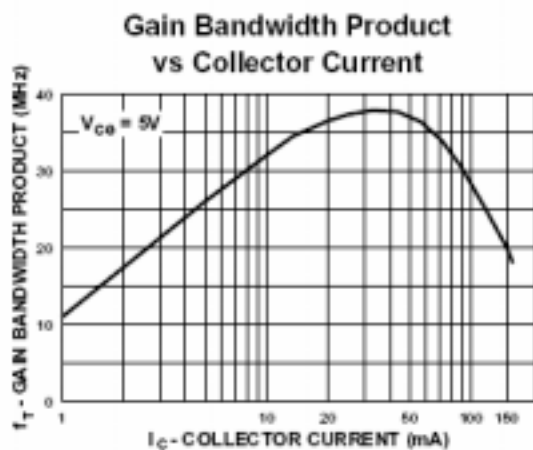
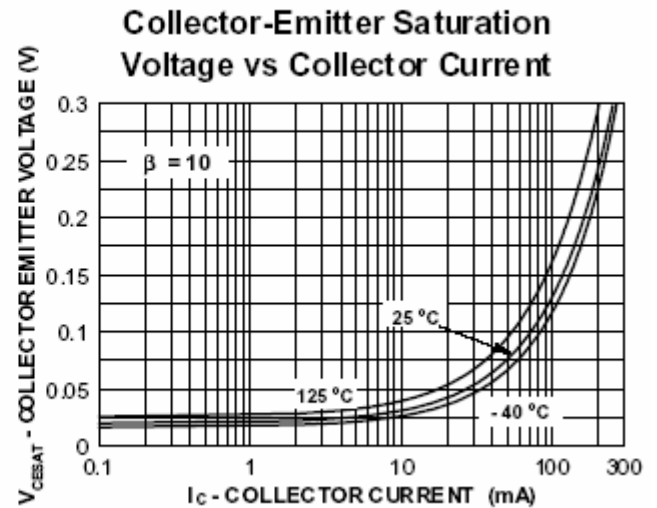
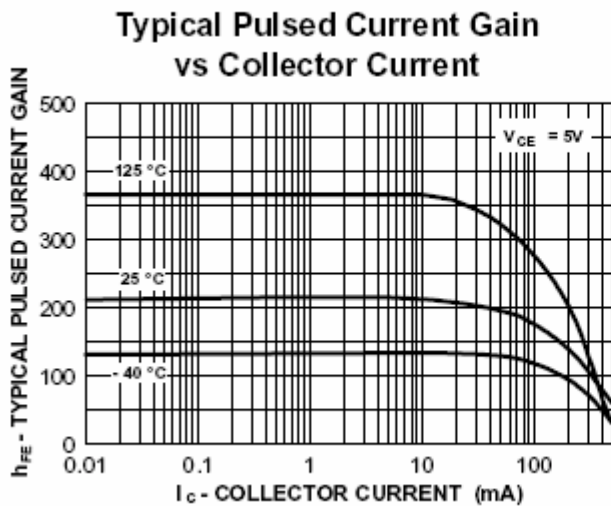


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.006	.014	0.15	0.35	
B	.045	.053	1.15	1.35	
C	.085	.096	2.15	2.45	
D	.026		0.65	Nominal	
G	.047	.055	1.20	1.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
M	.003	.006	0.08	0.15	

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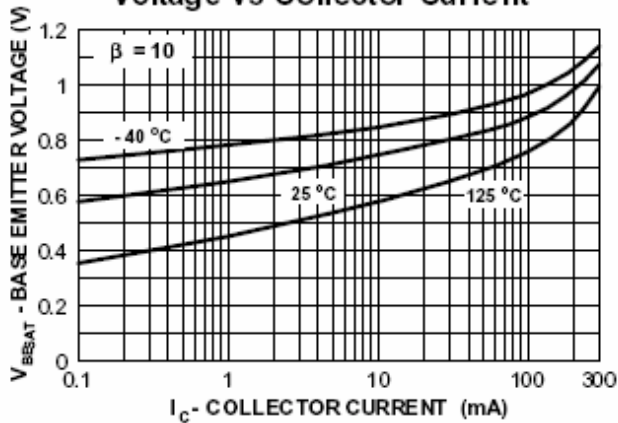
ELECTRICAL CHARACTERISTICS(T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0	-50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA, I _B =0	-45			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-30V, I _E =0			-15	nA
DC current gain	h _{FE}	V _{CE} =-5V, I _C =-2mA	125		630	
Collector-emitter saturation voltage	V _{CE(sat)(1)}	I _C =-10mA, I _B =-0.5mA			-0.3	V
	V _{CE(sat)(2)}	I _C =-100mA, I _B =-5mA			-0.65	V
Base-emitter voltage	V _{BE(1)}	V _{CE} =-5V, I _C =-2mA	-0.6		-0.75	V
	V _{BE(2)}	V _{CE} =-5V, I _C =-10mA			-0.82	V
Transition frequency	f _T	V _{CE} =-5V, I _C =-10mA, f=100MHz		200		MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz		3.5		pF
Noise figure	NF	V _{CE} =-5V, I _C =-0.2mA, f=1kHz, R _s =2KΩ, BW=200Hz		2.5		dB

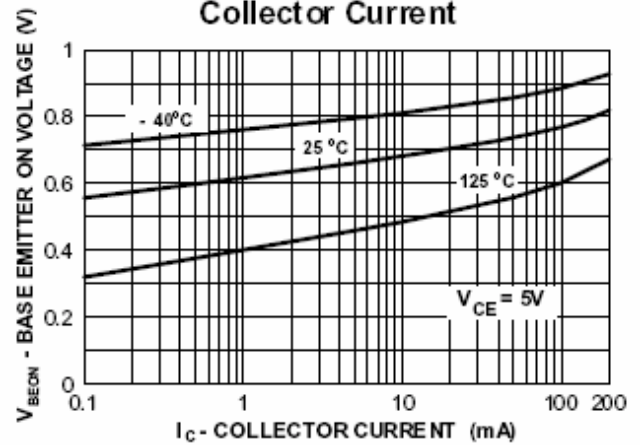


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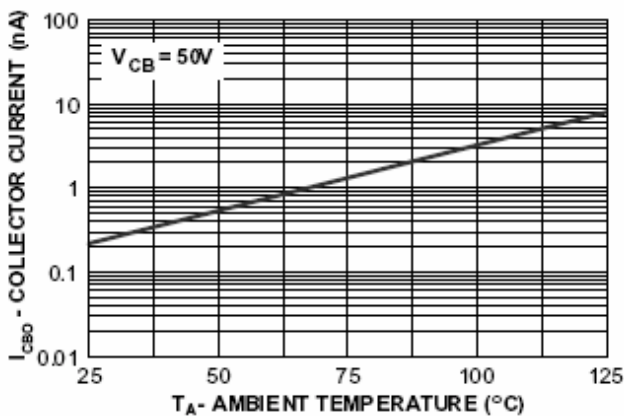
Base-Emitter Saturation Voltage vs Collector Current



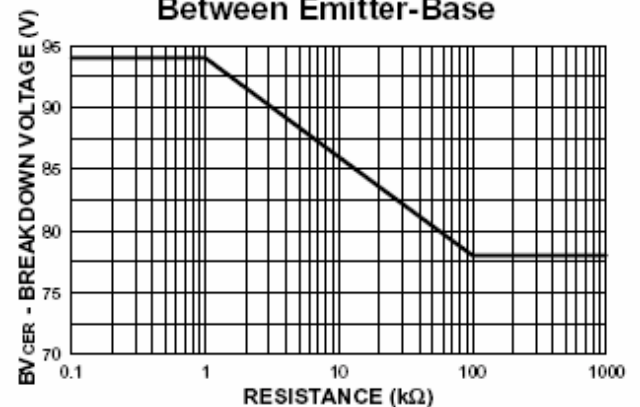
Base Emitter ON Voltage vs Collector Current



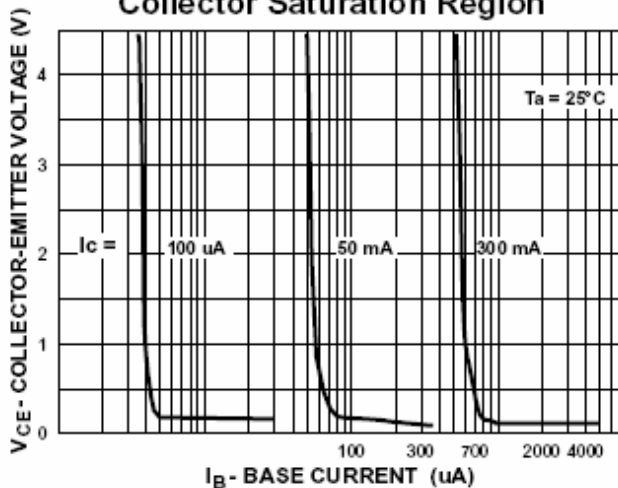
Collector-Cutoff Current vs Ambient Temperature



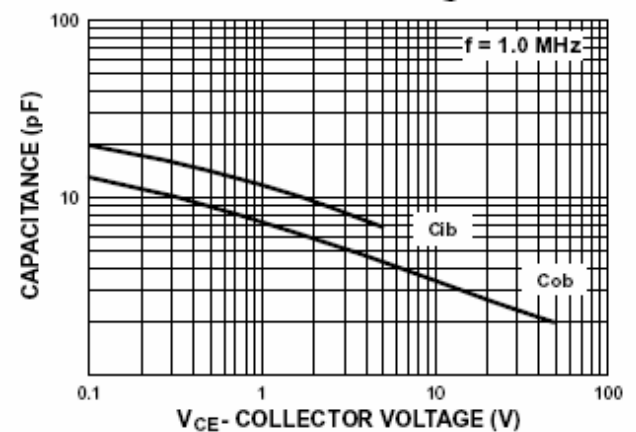
Collector-Emitter Breakdown Voltage with Resistance Between Emitter-Base



Collector Saturation Region



Input and Output Capacitance vs Reverse Voltage



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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