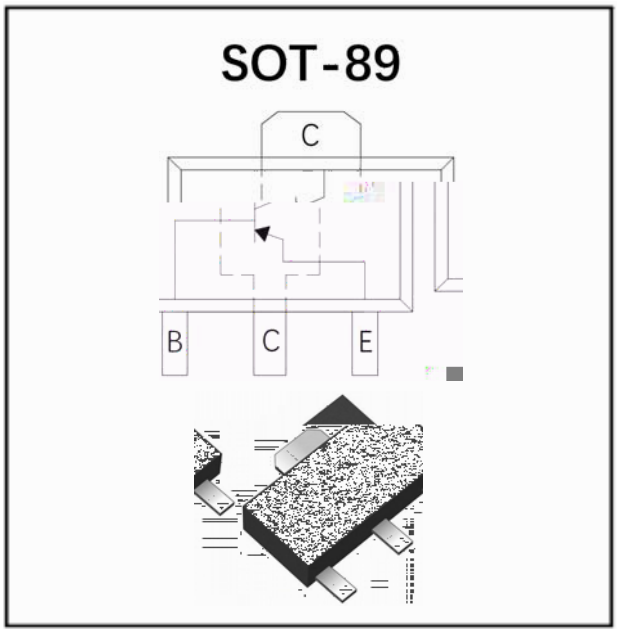


- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix ”HF”
- Moitsure Sensitivity Level 1
- Low collector-emitter saturation voltage

- : SOT-89
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking:

BCX53	AH
BCX53-16	AL

■ (Ta=25 unless otherwise noted)

Minimum Collector-Emitter Voltage	V_{CEO}	V	I_C=-10mA, I_B=0	-80
Minimum Collector-Base Voltage	V_{CBO}	V	I_C=-100uA, I_E=0	-100
Minimum Emitter-Base Voltage	V_{EBO}	V	I_E=-100uA, I_C=0	-5
Collector Current	I_C	A		-1
Collector Power Dissipation	P_C	mW		500
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	/W		250
Operation Junction Temperature	T_j			-55 to +150
Storage Temperature	T_{stg}			-55 to +150

■ (Ta=25 unless otherwise noted)

Collector-Emitter Voltage	V_{CEO}	V	I_C=-10mA, I_B=0	-80		
Collector-Base Voltage	V_{CBO}	V	I_C=-100uA, I_E=0	-100		
Emitter-Base Voltage	V_{EBO}	V	I_E=-100uA, I_C=0	-5		
Collector-Base cut-off current	I_{CBO}	nA	V_{CB}=-30V			-100
Emitter-Base cut-off current	I_{EB0}	nA	V_{EB}=-5V			-100
DC Current Gain	$h_{FE}1$		V_{CE}=-2V I_C=-150mA	63		250
	$h_{FE}2$		V_{CE}=-2V I_C=-5mA	63		
	$h_{FE}3$		V_{CE}=-2V I_C=-500mA	40		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	I_C=-500mA I_B=-50mA			-0.5
Base-Emitter Voltage	V_{BE}	V	V_{CE}=-2V I_C=-500mA			-1
Transition Frequency	f_T	MHz	I_C=-10mA, V_{CE}=-5V,f=100MHz		50	

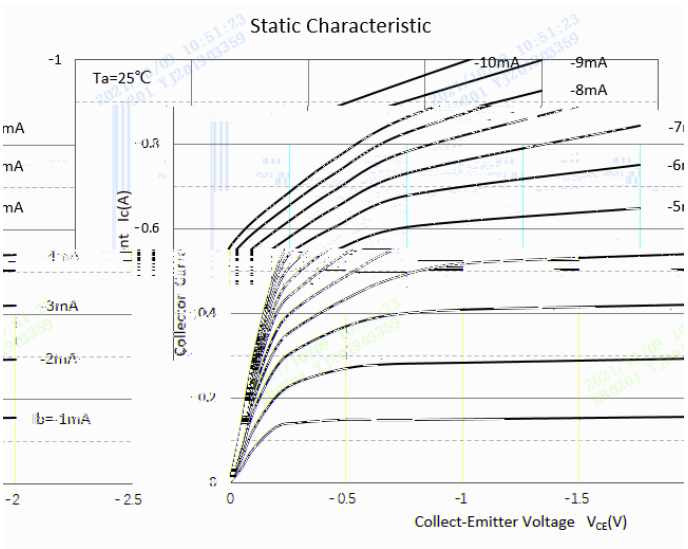
■ (Example)

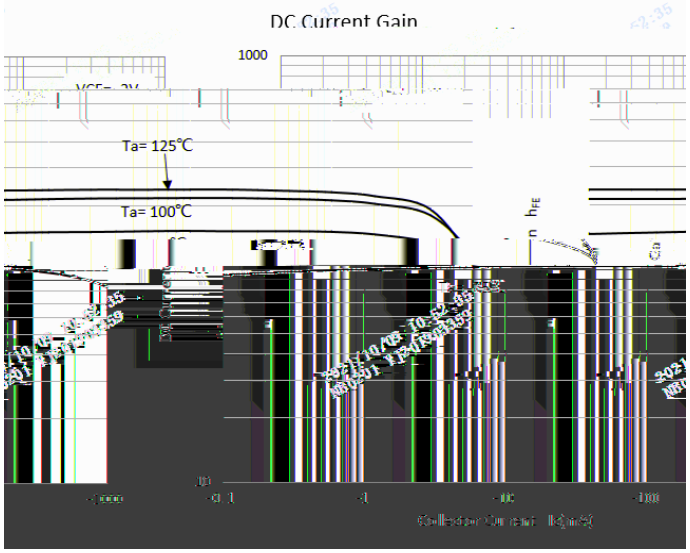
BCX53	F2	Approximate 0.055	1000	8000	32000	7” reel

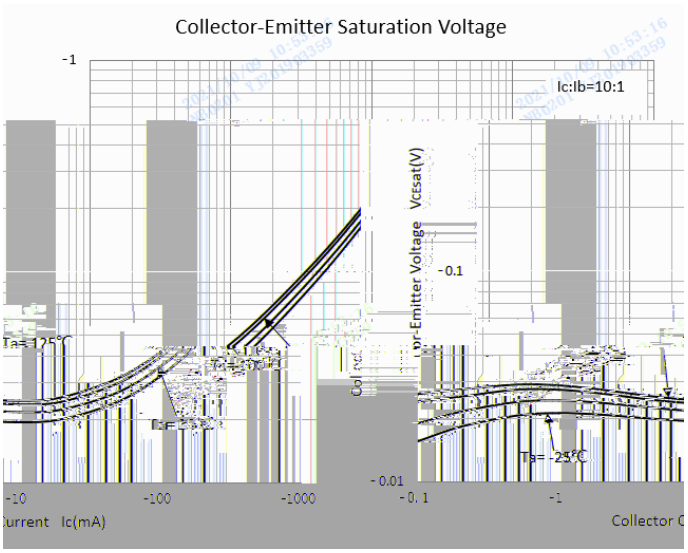
■

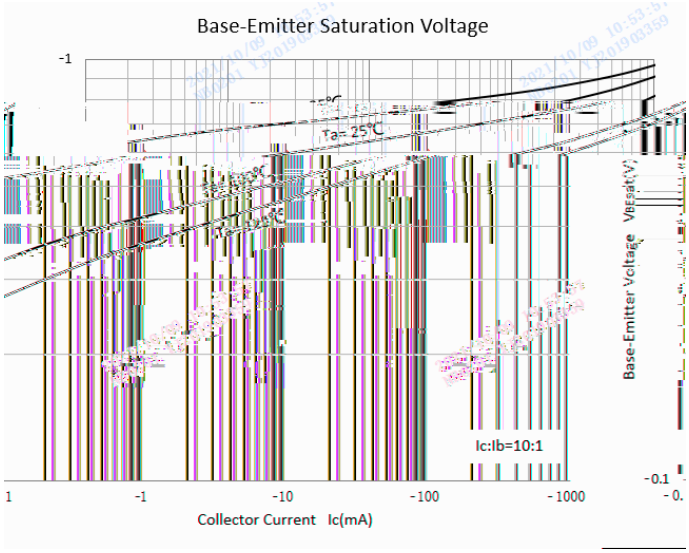
Range	63-250	100-250

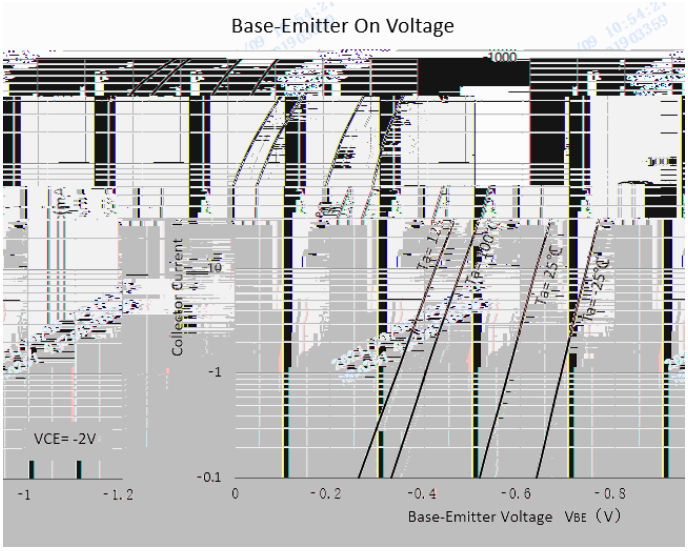
■ (Typical)

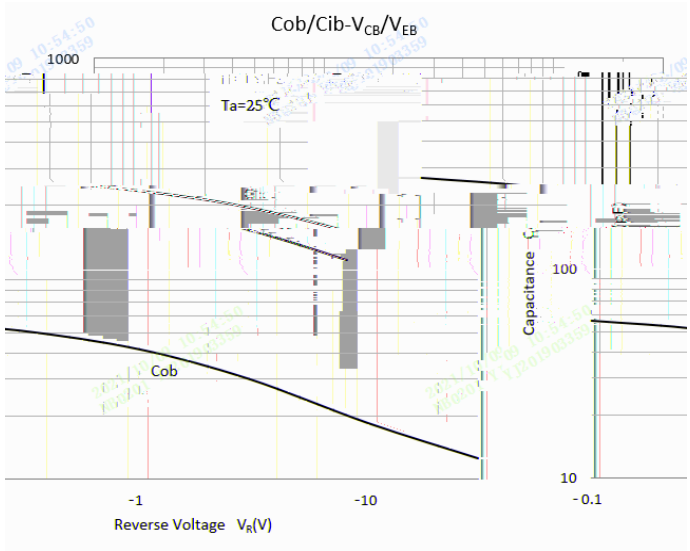


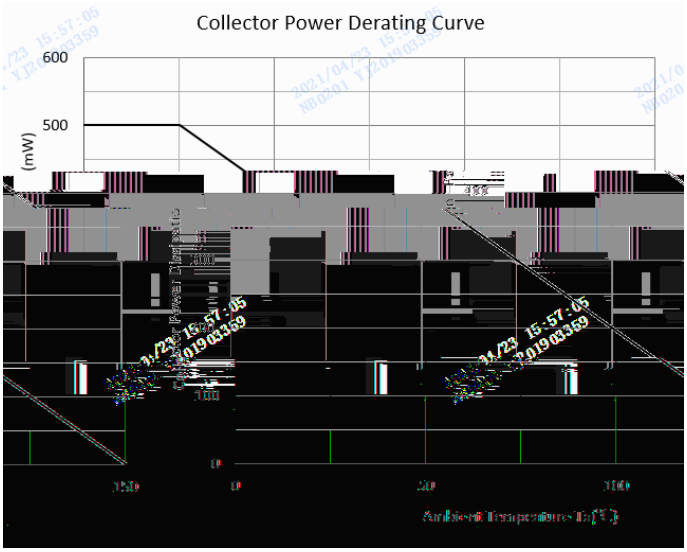



Collector-Emitter Saturation Voltage
Ic:Ib=10:1
Ta=125°C
Ta=-25°C
-1
-0.1
-0.01
-10
-100
-1000
-0.1
-1
Current Ic(mA)

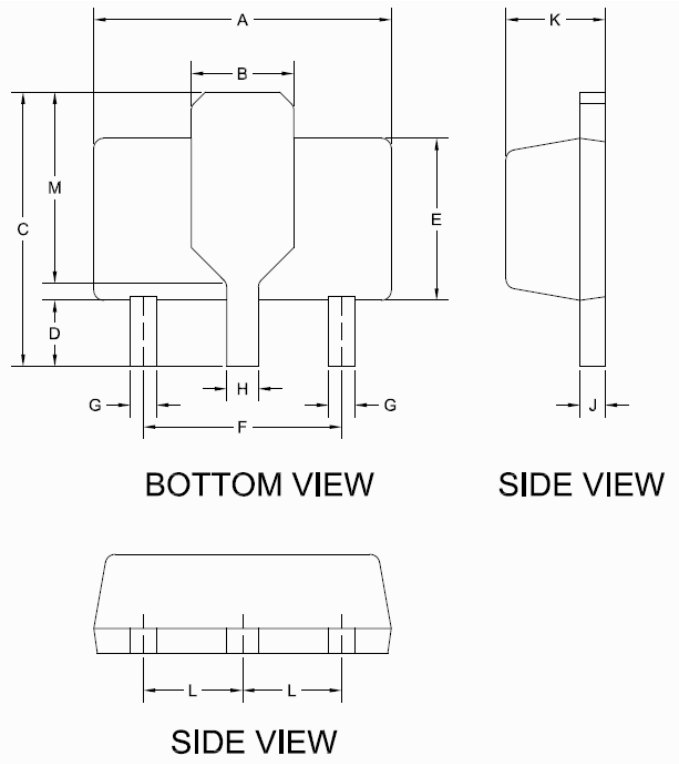

Base-Emitter Saturation Voltage
Ta=25°C
Ic:Ib=10:1
-1
-10
-100
-1000
Collector Current Ic(mA)


Base-Emitter On Voltage
VCE=-2V
Ta=125°C
Ta=25°C
Ta=-25°C
1000
-1
-0.1
-1
-1.2
0
-0.2
-0.4
-0.6
-0.8
Base-Emitter Voltage VBE (V)

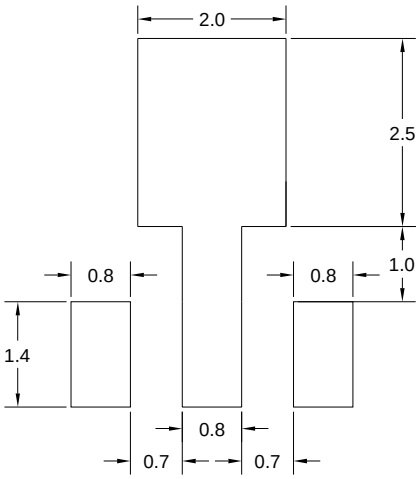

Cob/Cib-VCB/VEB
Ta=25°C
Cob
1000
100
10
-1
-10
-0.1
Capacitance
Reverse Voltage VR(V)


Collector Power Derating Curve
600
500
(mW)

■



DIM	INCHES		MM	
	MIN.	MAX.	MIN.	MAX.
A	0.173	0.181	4.400	4.600
B	0.061 TYP.		1.550 TYP.	
C	0.155	0.167	3.940	4.250
D	0.031	0.047	0.800	1.200
E	0.094	0.102	2.400	2.600
F	0.118 TYP.		3.00 TYP.	
G	0.014	0.019	0.360	0.480
H	0.017	0.022	0.440	
J	0.014	0.017	0.350	
K	0.055	0.063	1.400	
M	0.108 TYP.			



UNIT:MM

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment