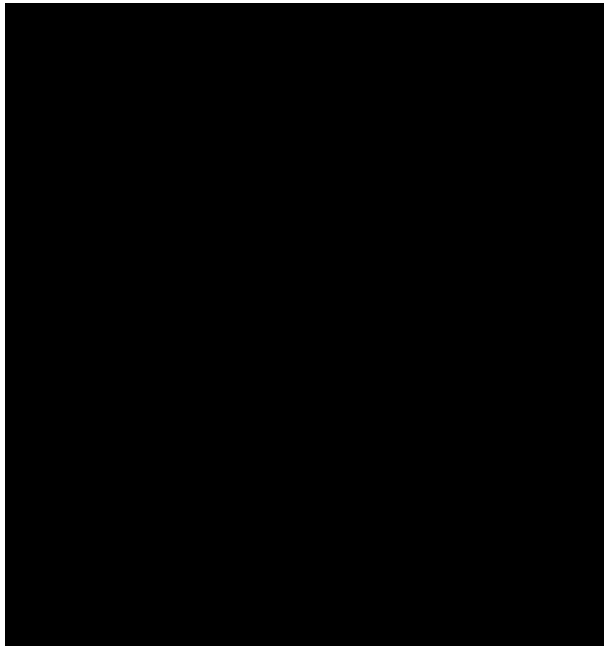


NPN General Purpose Amplifier



Features

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

Mechanical Data

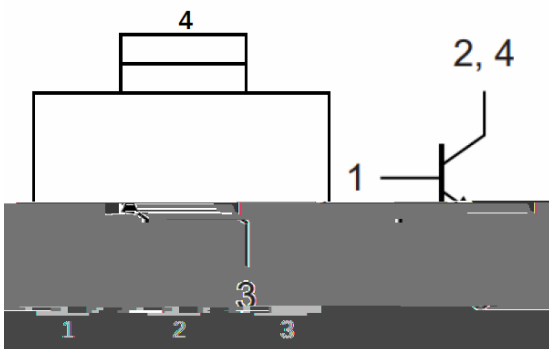
Package: SOT-223

Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Marking:

Product	Marking
BCP54	BCP54-16
BCP54-16	BCP54-16

Equivalent circuit



Maximum Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	V_{CEO}	V	$I_C=10mA, I_B=0$	45
Minimum Collector-Base Voltage	V_{CBO}	V	$I_C=100\mu A, I_E=0$	45
Minimum Emitter-Base Voltage	V_{EBO}	V	$I_E=100\mu A, I_C=0$	5
Collector Current	I_C	A		1
Power Dissipation Note 1	P_D	W		1
Thermal Resistance From Junction To Ambient	R_{JA}	/W		125
Operation Junction Temperature	T_j			-55 to +150
Storage Temperature	T_{stg}			-55 to +150

Note 1 Device mounted on an FR4 PCB, mounting pad for collector 1 cm²



BCP54

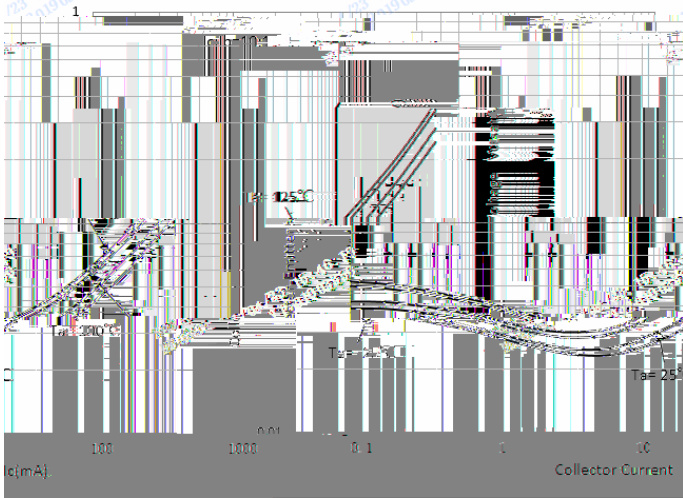
E

	Item	Symbol	Unit	Conditions	Min	TYP	Max
	Collector-Emitter Voltage	V_{CE0}	V	$I_C=10mA, I_B=0$	45	-	-

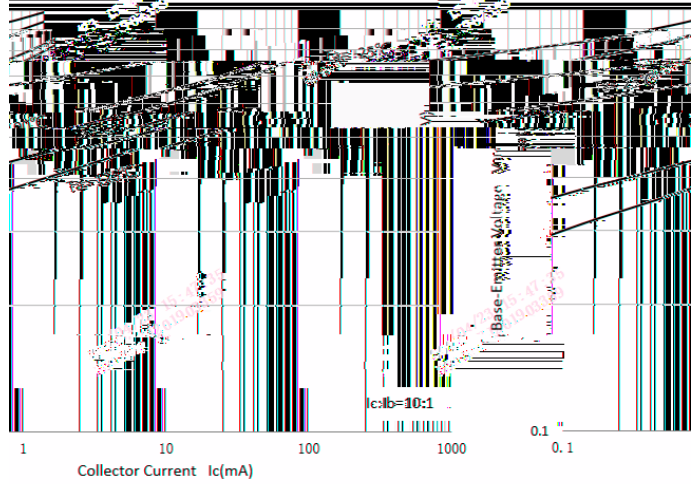


BCP54

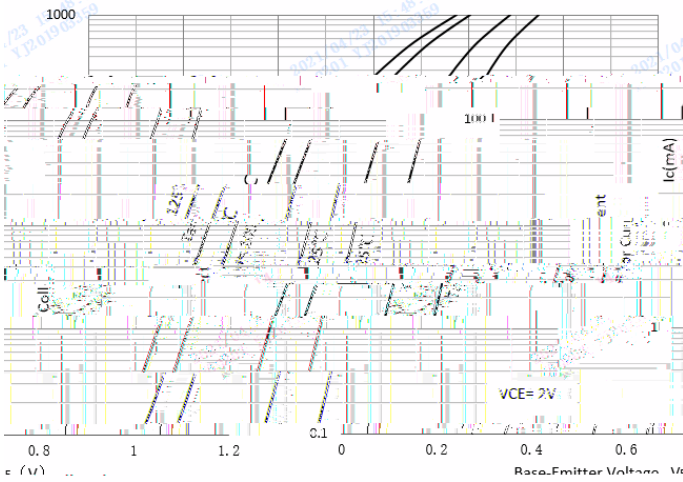
Collector-Emitter Saturation Voltage



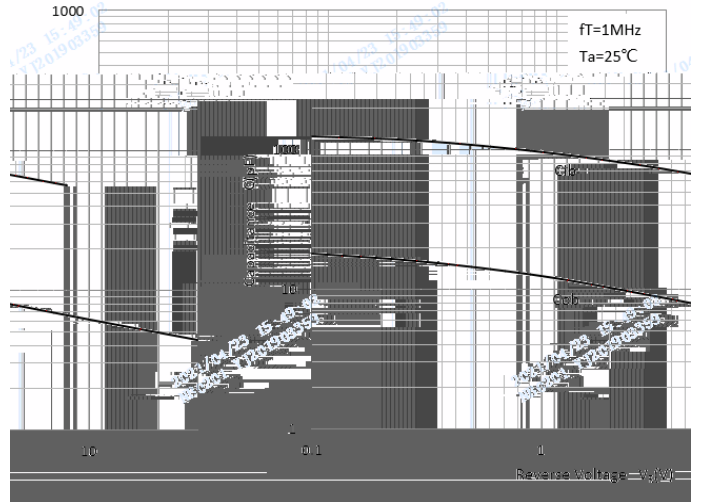
Base-Emitter Saturation Voltage



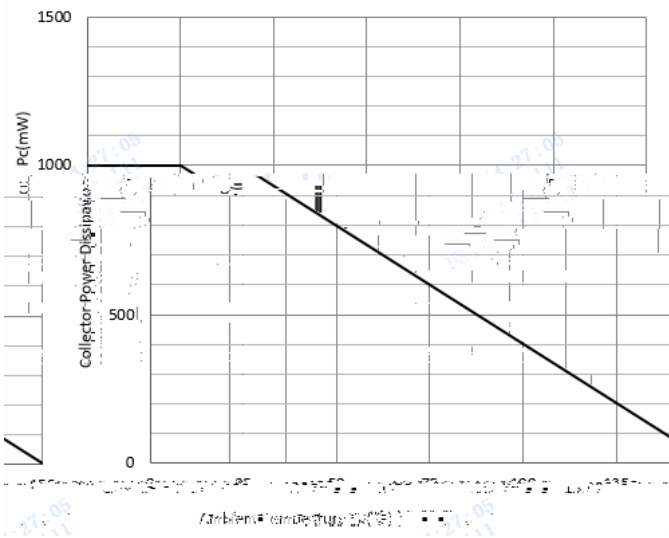
Base-Emitter On Voltage



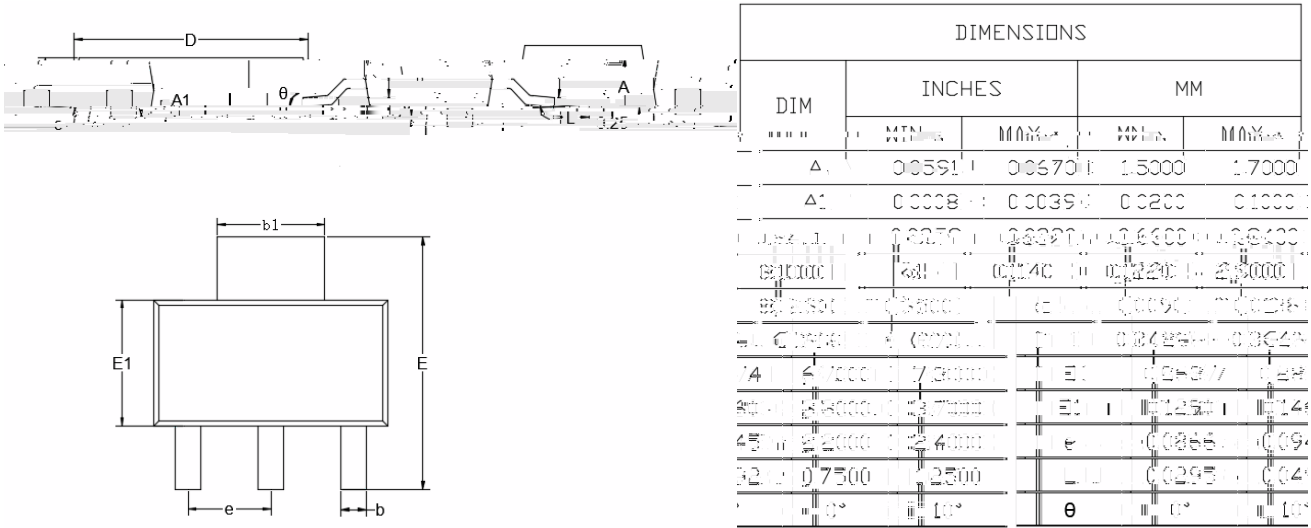
Cob/Cib- V_{CB}/V_{EB}



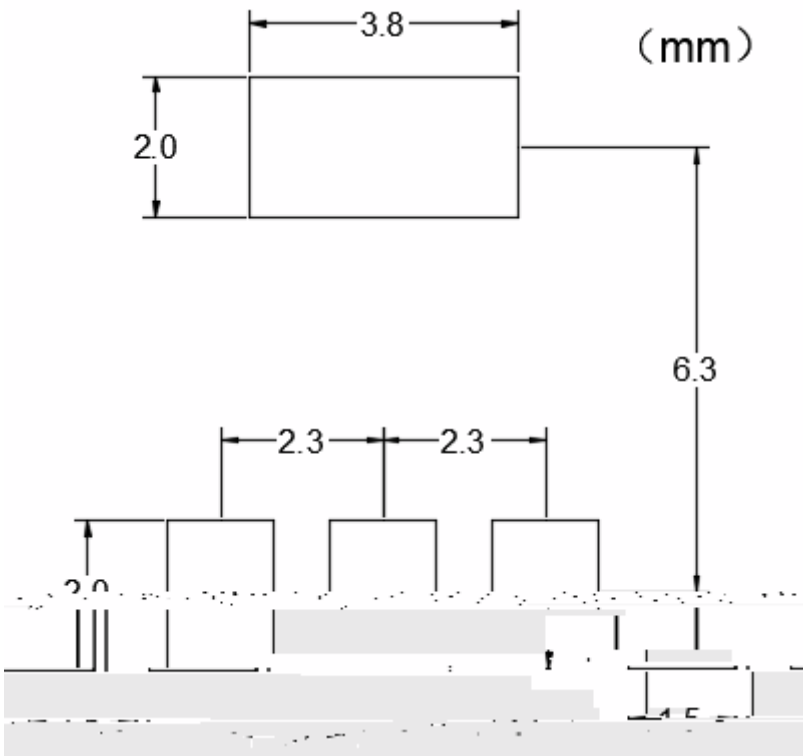
Collector Power Derating Curve



SOT-223 Package Outline Dimensions



SOT-223 Suggested Pad Layout





BCP54

Disclaimer

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