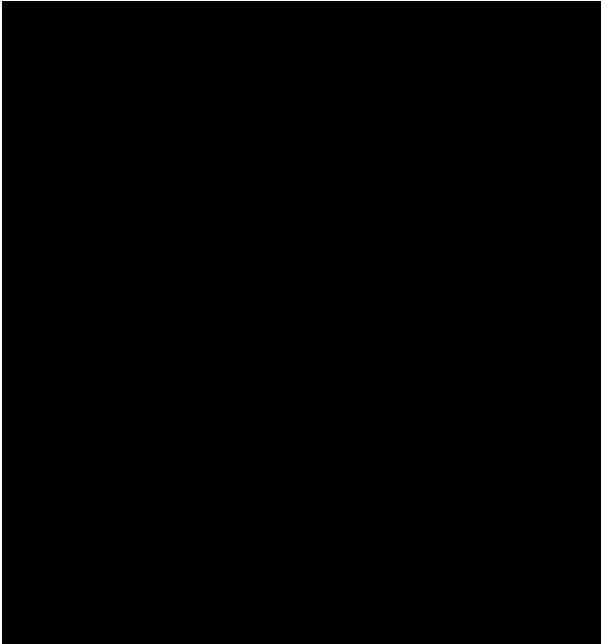


PNP Transistor



Features

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

Mechanical Data

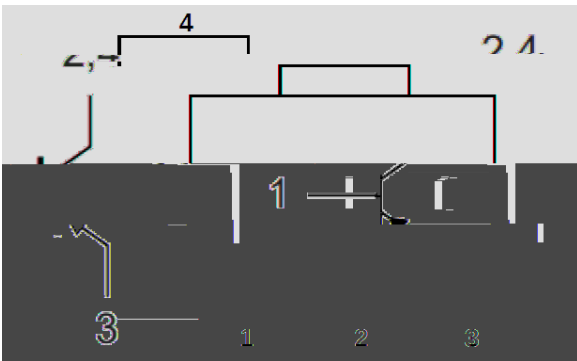
Package: SOT-223

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

Marking:

Product	Marking
BCP51-10	BCP51-10
BCP51-16	BCP51-16

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	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



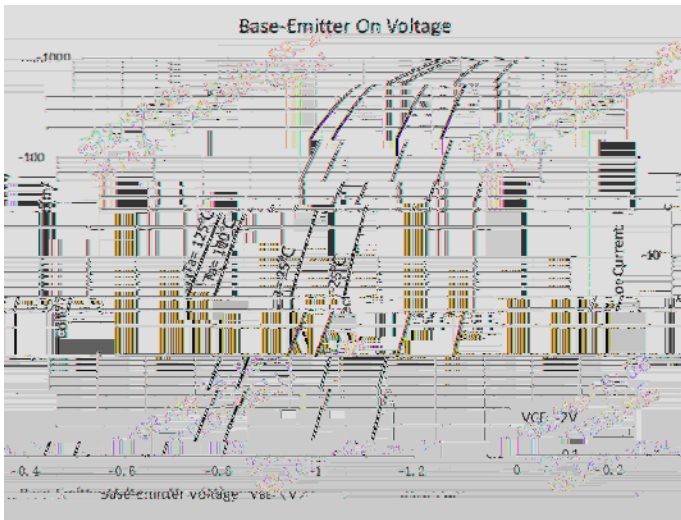
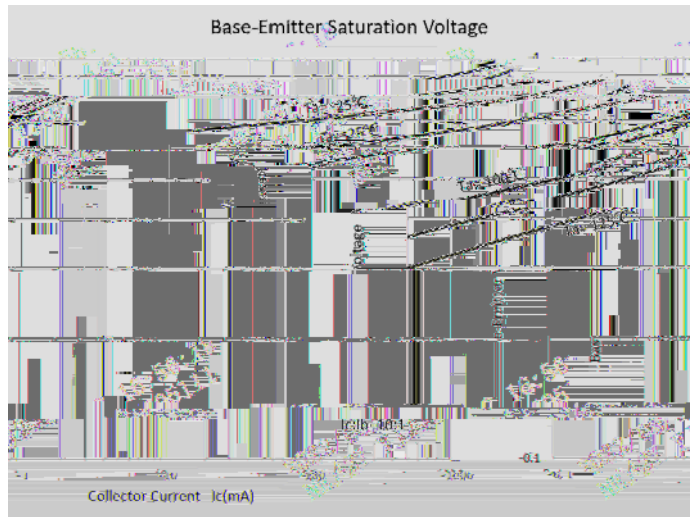
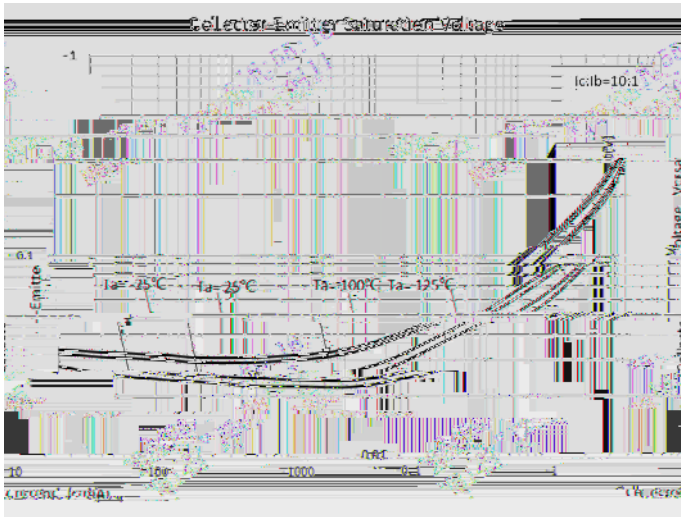
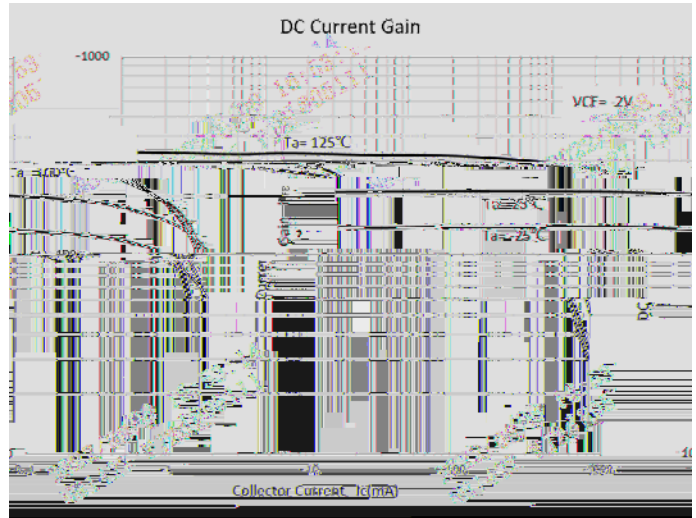
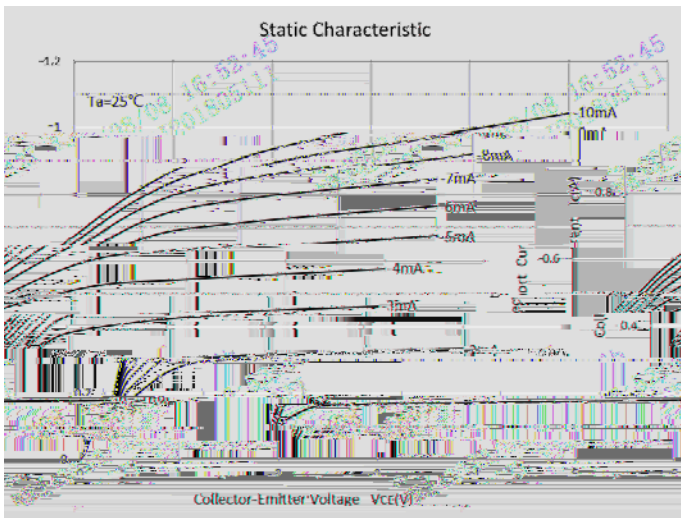
BCP51

Electrical Characteristics (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-base breakdown voltage	V_{CBO}	V	$I_C = -100\mu A, I_E = 0$	-45	-	-
Collector-emitter breakdown voltage	V_{CEO}	V	$I_C = -10mA, I_B = 0$	-45	-	-
Emitter-base breakdown voltage	V_{EBO}	V	$I_E = -100\mu A, I_C = 0$	-5	-	-
Collector-base cut-off current	I_{CBO}	nA	$V_{CB} = -30V, I_E = 0$	-	-	-100
Collector-emitter cut-off current	I_{EBO}	nA	$V_{EB} = -5V, I_C = 0$	-	-	-100
DC current gain	h_{FE}		$V_{CE} = -2V, I_C = -5mA$	63	-	-
	h_{FE}		$V_{CE} = -2V, I_C = -150mA$	63	-	250
	h_{FE}		$V_{CE} = -2V, I_C = -500mA$	40	-	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C = -500mA, I_B = -50mA$	-	-	-0.5



Characteristics (Typical)



v627 3DFNDJH 2XWOLQH 'LPHQVLRQV

v627 6XJJHVWHG 3DG /D\RXW

