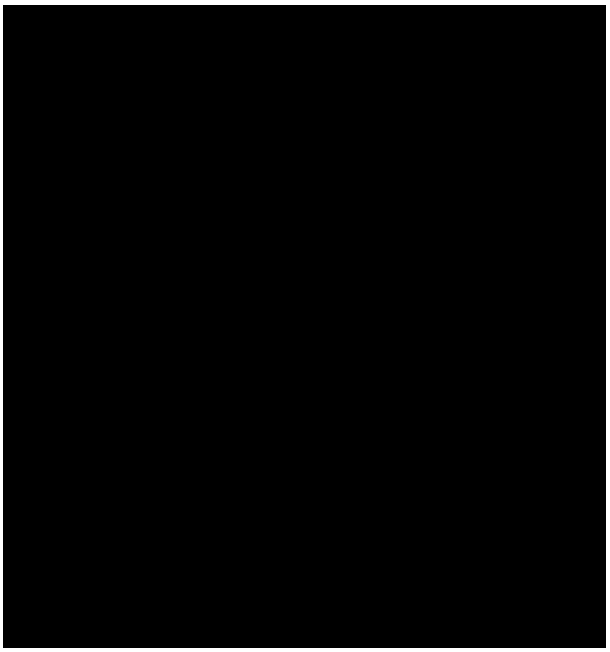
PNP Transistor



Features

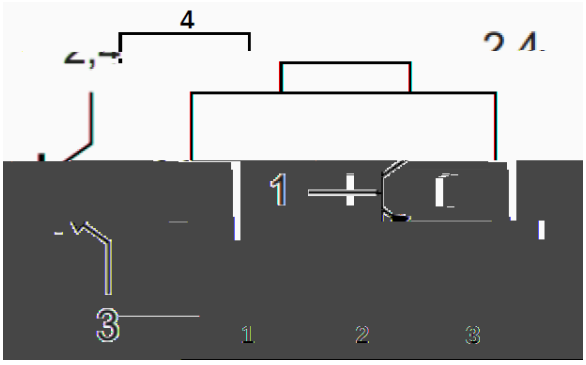
- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix ”HF”
- Moisture Sensitivity Level 1

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



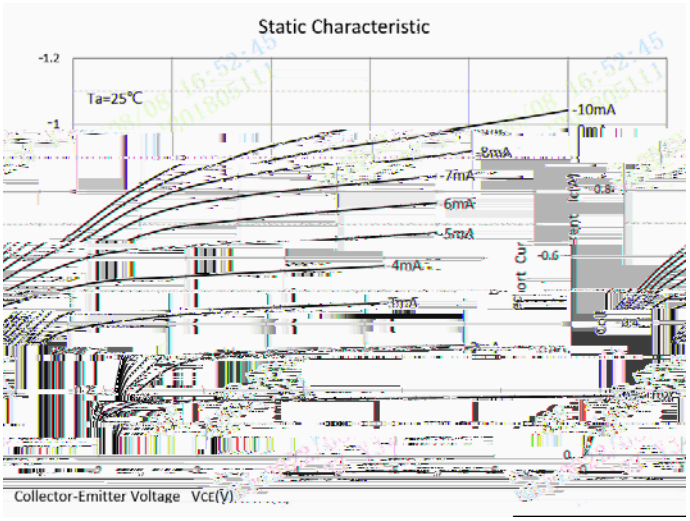
■Maximum Ratings (Ta=25 unless otherwise noted)

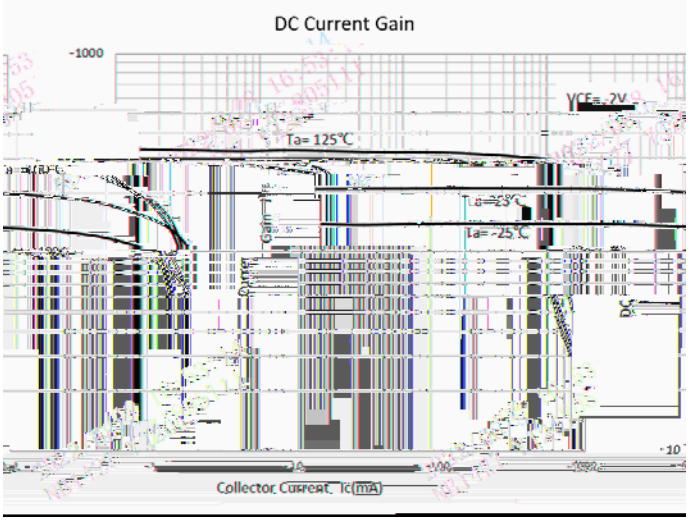
Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	V_{CEO}	V	I_C=-10mA, I_B=0	-45
Minimum Collector-Base Voltage	V_{CBO}	V	I_C=-100uA, I_E=0	-45
Minimum Emitter-Base Voltage	V_{EBO}	V	I_E=-100uA, I_C=0	-5
Collector Current	I_C	A		-1
Power Dissipation	P_D	W		1
Thermal Resistance From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

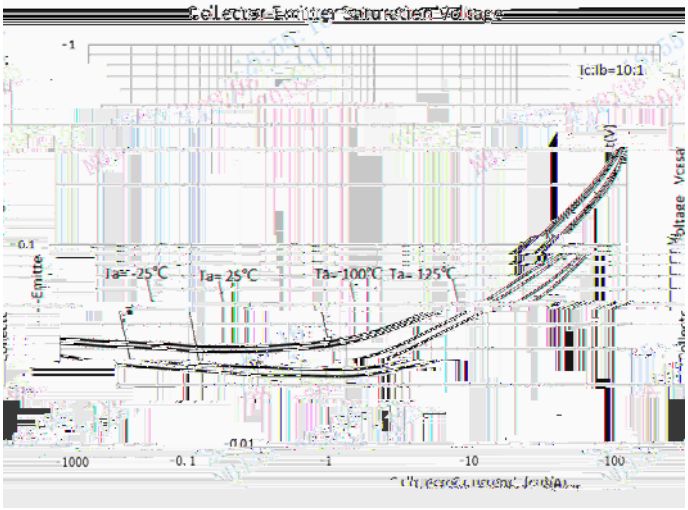
■**Electrical Characteristics** (Ta=25 unless otherwise noted)

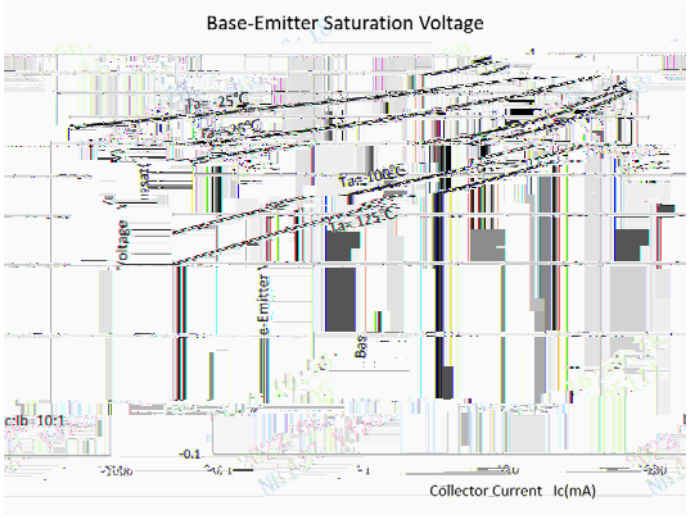
Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-base breakdown voltage	V_{CBO}	V	IC=-100μA,IE=0	-45	-	-
Collector-emitter breakdown voltage	V_{CEO}	V	IC =-10mA,IB=0	-45	-	-
Emitter-base breakdown voltage	V_{EBO}	V	IE=-100μA,IC=0	-5	-	-
Collector-base cut-off current	I_{CBO}	nA	VCB=-30V,IE=0	-	-	-100
Collector-emitter cut-off current	I_{EBO}	nA	VEB=-5V,IC=0	-	-	-100
DC current gain	h_{FE}		VCE=-2V,IC=-5mA	63	-	-
	h_{FE}		VCE=-2V,IC=-150mA	63	-	250
	h_{FE}		VCE=-2V,IC=-500mA	40	-	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	IC=-500mA,IB=-50mA	-	-	-0.5

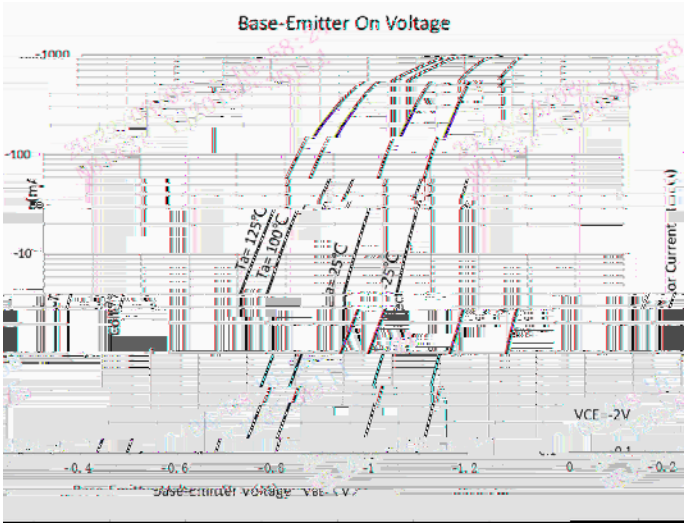
■**Characteristics** (Typical)











v627 3DFNDJH 2XWOLQH 'LPHQVLRQV

v627 6XJJHVWHG 3DG /D\RXW