



BCP69-16
BCP69-25

PNP
Plastic-Encapsulate
Transistors

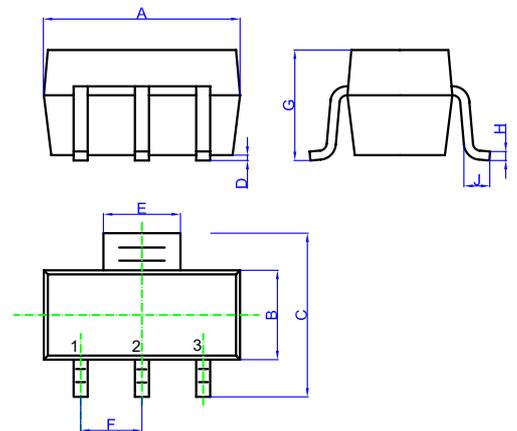
Features

- 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
- High Current and Low Voltage
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings @ 25°C Unless Otherwise Specified

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-32	V
V _{CEO}	Collector-Emitter Voltage	-20	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-1	A
P _C	Collector Power Dissipation	1	W
R _{θJA}	Thermal Resistance From Junction To Ambient	125	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

SOT-223



1.BASE
2.COLLECTOR
3.EMITTER

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.248	.264	6.30	6.70	
B	.130	.146	3.30	3.70	
C	.264	.287	6.70	7.30	
D	.001	.004	0.02	0.10	
E	.114	.122	2.90	3.10	
F	.091		2.30		
G	---	.071	---	1.80	
H	.009	.014	0.23	0.35	
J	.030	---	0.75	---	

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-0.1mA, I _E =0	-32			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-0.1mA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-25V, I _E =0			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC current gain	h _{FE(1)}	V _{CE} =-1V, I _C =-0.5A	85		375	
	h _{FE(2)}	V _{CE} =-1V, I _C =-1A	60			
	h _{FE(3)}	V _{CE} =-10V, I _C =-5mA	50			
	h _{FE(4)}	V _{CE} =-1.8V, I _C =-10mA	140		230	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-1A, I _B =-100mA			-0.5	V
Base-emitter voltage	V _{BE(1)}	V _{CE} =-10V, I _C =-5mA			-0.68	V
	V _{BE(2)}	V _{CE} =-1V, I _C =-1A			-1	V
Transition frequency	f _T	V _{CE} =-5V, I _C =-10mA, f=100MHz	40			MHz
Collector output capacitance	C _{ob}	V _{CB} =-5V, I _E =0, f=1MHz		48		pF

CLASSIFICATION OF h_{FE(2)}

Rank	BCP69-16	BCP69-25
Range	100-250	160-375



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 2.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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