

RoHS Compliant Product

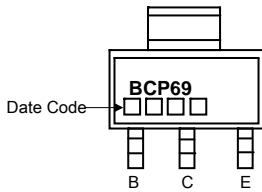
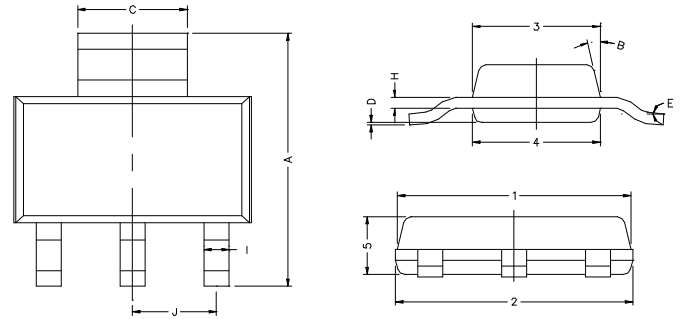
**SOT-223**

**Description**

The BCP69 is designed for use in low voltage and medium power applications.

**Features**

- \*  $V_{CE0} : -20V$
- \*  $I_C : 1A$



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.70	7.30	B	13 TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

**MAXIMUM RATINGS\* ( $T_{amb}=25^{\circ}C$ , unless otherwise specified)**

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	- 25	V
$V_{CEO}$	Collector-Emitter Voltage	- 20	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-1	A
$P_D$	Total Power Dissipation	1.5	W
$T_J, T_{stg}$	Junction and Storage Temperature	-65~-150	$^{\circ}C$

**ELECTRICAL CHARACTERISTICS  $T_{amb}=25^{\circ}C$  unless otherwise specified**

Parameter	Symbol	Min	Typ.	Max	Uni	Test Conditions
Collector-Base Breakdown Voltage	$BV_{CBO}$	- 25	-	-	V	$I_C=-100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	- 20	-	-	V	$I_C=-1mA, I_B=0$
Emitter-Base Breakdown Voltage	$BV_{EBO}$	-5	-	-	V	$I_E=-10\mu A, I_C=0$
Collector-Base Cutoff Current	$I_{CBO}$	-	-	- 10	$\mu A$	$V_{CB}=-25V, I_E=0$
Emitter-Base Cutoff Current	$I_{EBO}$	-	-	- 10	$\mu A$	$V_{EB}=-5V, I_C=0$
Collector Saturation Voltage	* $V_{CE(sat)1}$	-	-	- 500	mV	$I_C=-1mA, I_B=-100mA$
Base-Emitter Voltage	* $V_{BE(on)}$	-	-	- 1.0	V	$V_{CE}=-1V, I_C=-1A$
DC Current Gain	* $h_{FE1}$	50	-	-		$V_{CE}=-10V, I_C=-5mA$
	* $h_{FE2}$	85	-	375		$V_{CE}=-1V, I_C=-500mA$
	* $h_{FE3}$	60	-	-		$V_{CE}=-1V, I_C=-1A$
Gain-Bandwidth Product	fT	-	60	-	MHz	$V_{CE}=-5V, I_C=-10mA$

\*Pulse Test: Pulse Width  $\leq 380\mu s$ , Duty Cycle  $\leq 2\%$

CHARACTERISTIC CURVES

