

## PNP General Purpose Amplifier

## BCW30

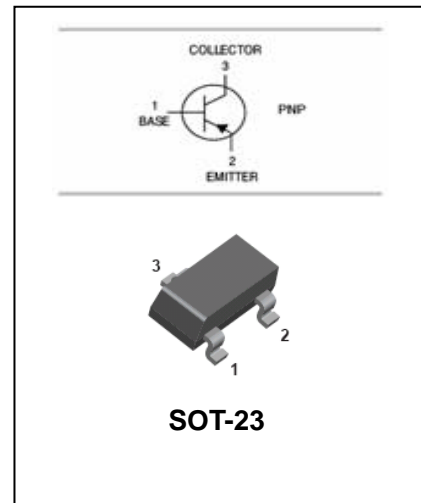
### FEATURES

- Ideally suited for automatic insertion.
- Epitaxial planar die construction.



### APPLICATIONS

- This device is designed for general purpose amplifier and switching applications.



### ORDERING INFORMATION

Type No.	Marking	Package Code
BCW30	C2X	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-32	V
$V_{CEO}$	Collector-Emitter Voltage	-32	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-100	mA
$P_D$	Total Device Dissipation	300	mW
$R_{\theta jA}$	Thermal Resistance Junction to Ambient	417	°C/W
$T_j, T_{stg}$	Junction and Storage Temperature	-55to+150	°C

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### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A$ $I_E = 0$	-32		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -2.0mA$ $I_B = 0$	-32		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A$ $I_C = 0$	-5		$\mu V$
Collector cut-off current	$I_{CBO}$	$V_{CB} = -32V$ $I_E = 0$		-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -5V$ $I_C = -2.0mA$	215	500	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA$ $I_B = -50mA$		-0.7	V
Output capacitance	$C_{ob}$	$V_{CB} = -10V$ $I_E = -0$ $f = 1MHz$		7.0	pF

### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

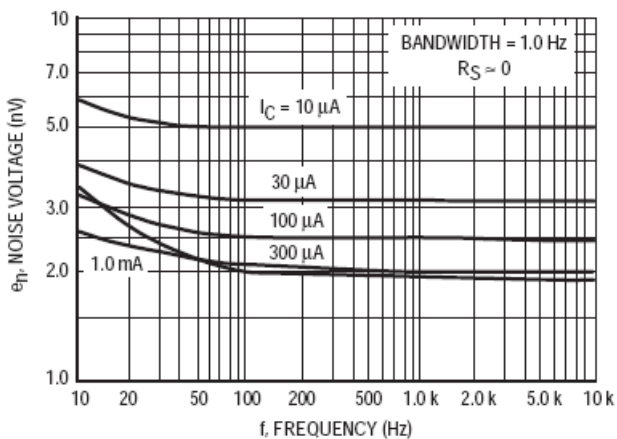


Figure 1. Noise Voltage

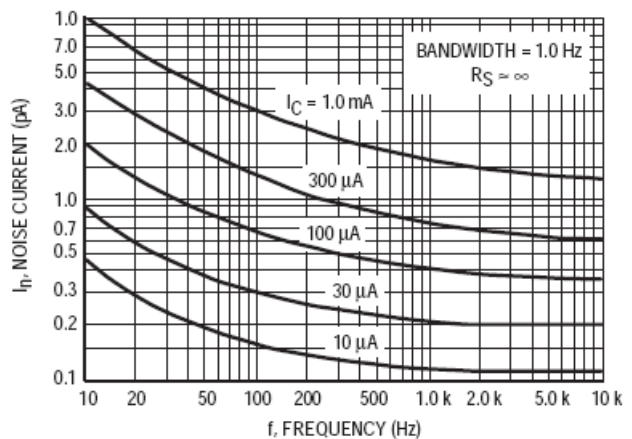


Figure 2. Noise Current

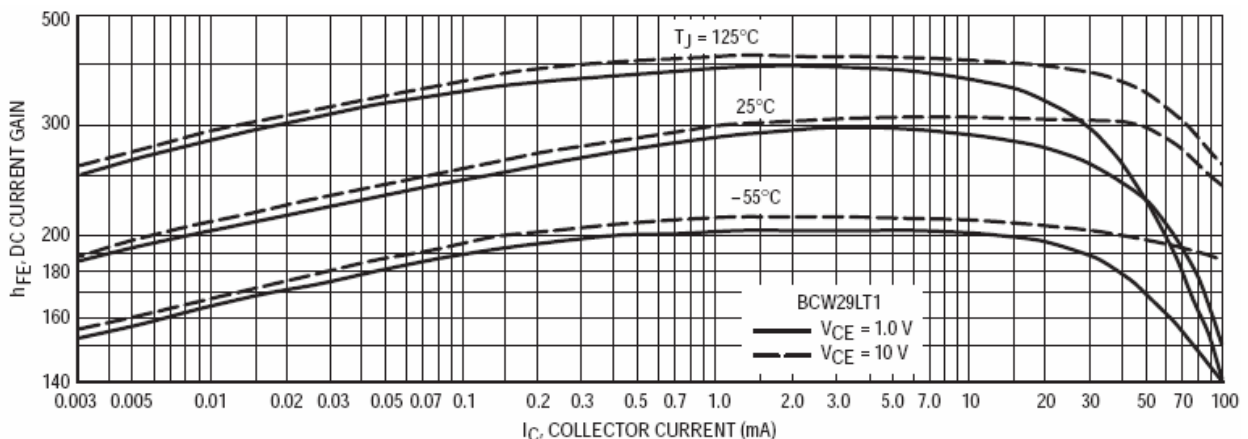


Figure 3. DC Current Gain

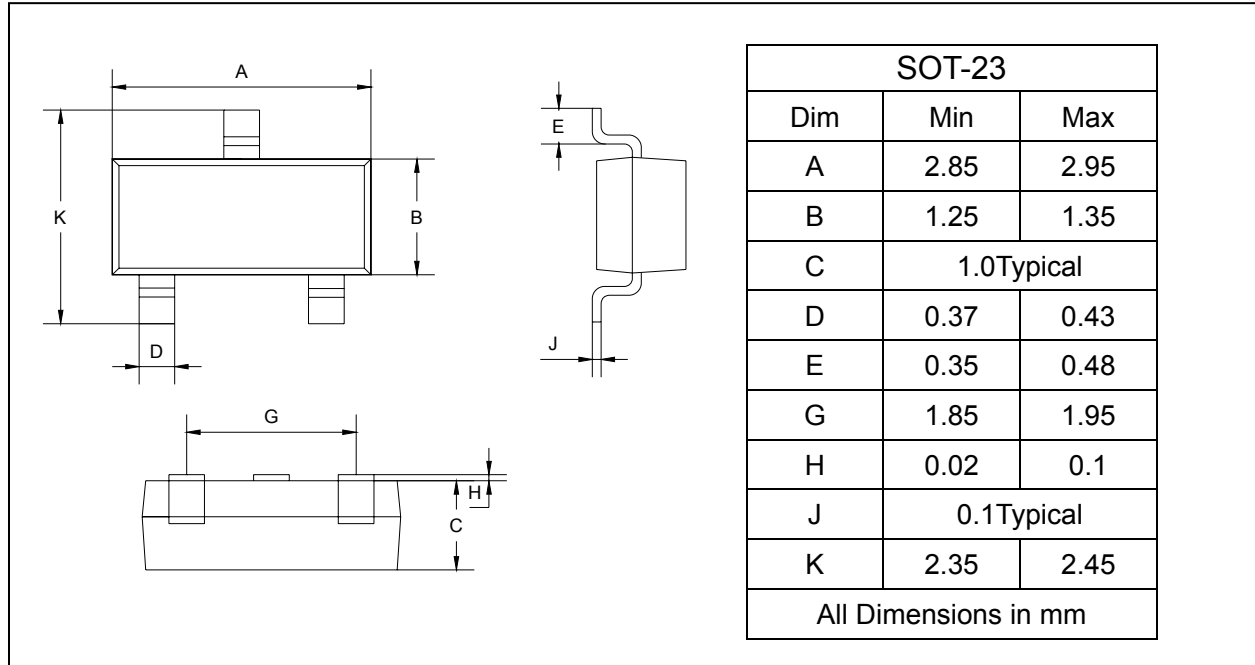
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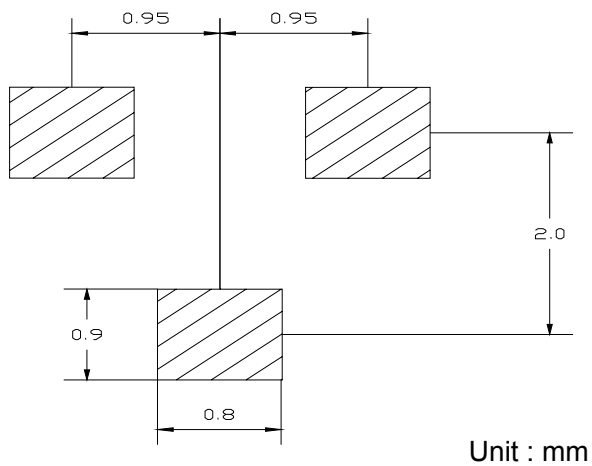
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BCW30	SOT-23	3000/Tape&Reel