

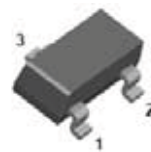
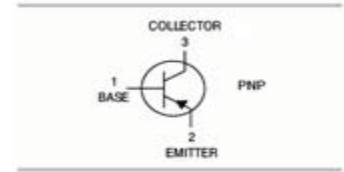
PNP General Purpose Amplifier: BCW30

Features:

- Ideally suited for automatic insertion
- Epitaxial planar die construction

Applications:

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



SOT-23

Ordering Information

Type No.	Marking:	Package Code:
BCW30	C2X	SOT-23

Maximum Ratings & Characteristics: Tamb=25°C unless otherwise specified

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

Maximum Ratings & Characteristics: Tamb=25°C unless otherwise specified

Parameter:	Symbol:	Test Conditions:	Min:	Typ:	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	$V_{(BR)EBQ}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -32V, I_E = 0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -2.0mA$	215		500	
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -0.5mA$			-0.3	V
Base Emitter On Voltage	$V_{BE(on)}$	$I_C = -2mA, V_{CE} = -5V$	-0.6		-0.75	V
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$			7.0	pF

Typical Characteristics: $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified

Ratings & Characteristic Curves

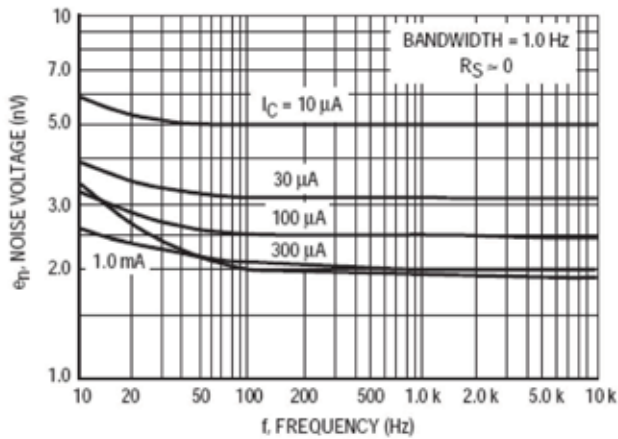


Figure 1. Noise Voltage

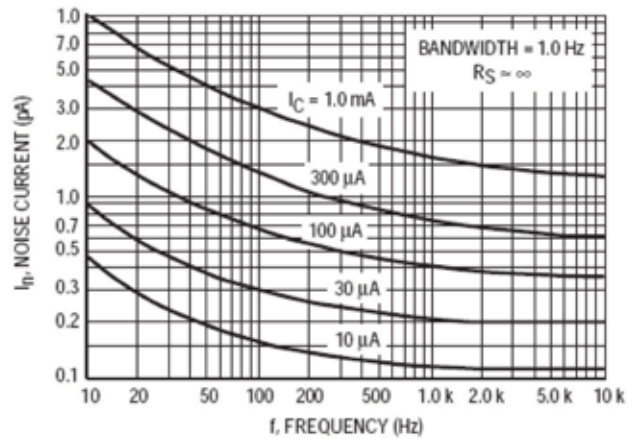


Figure 2. Noise Current

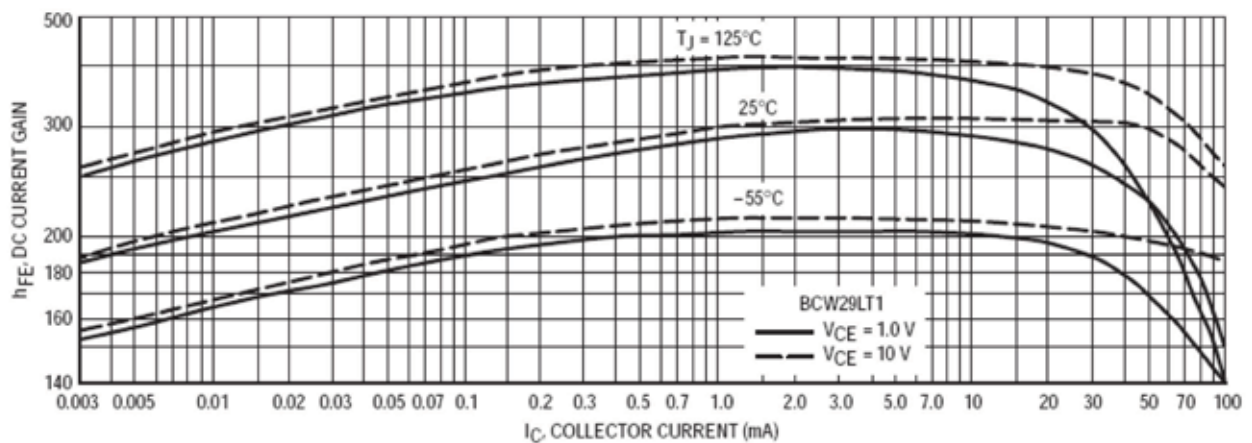
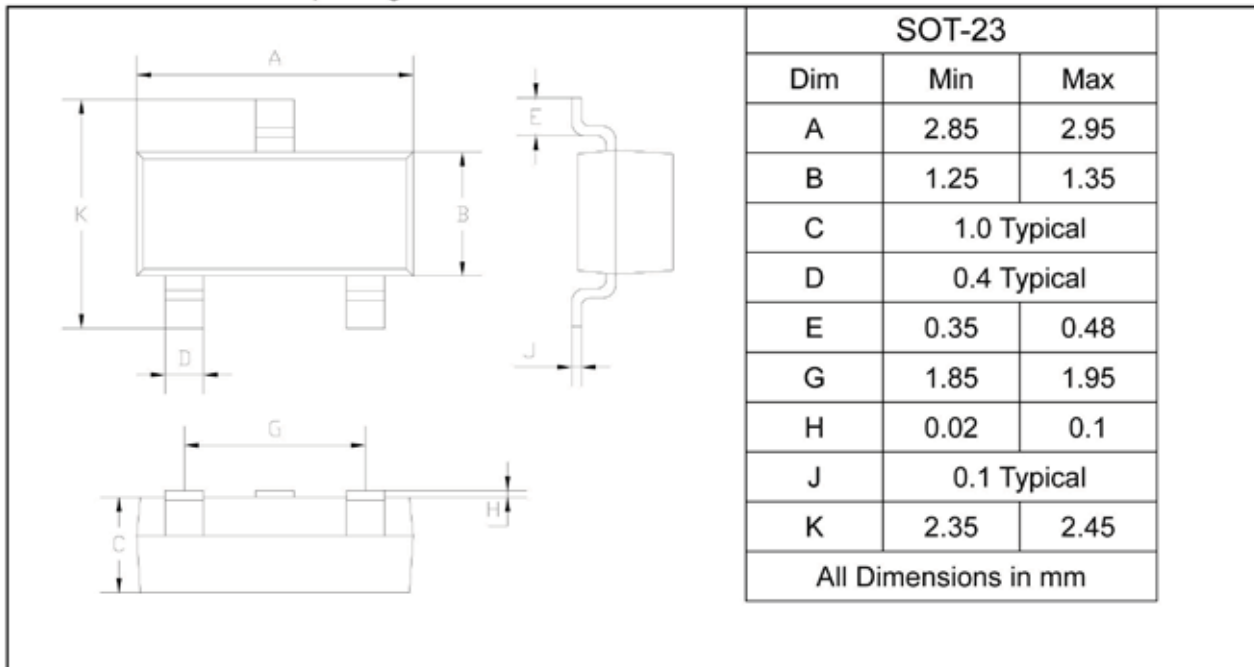


Figure 3. DC Current Gain

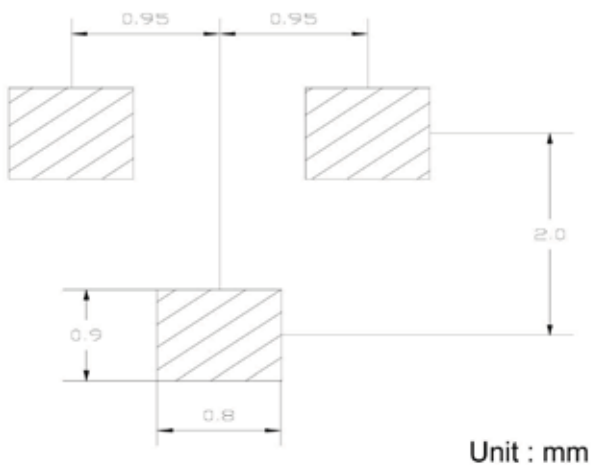
Package Outline

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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