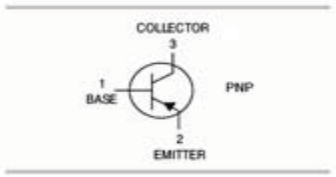
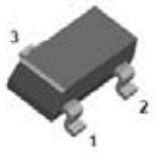
PNP General Purpose Amplifier: BCW30

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_{BJA}	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=-10µA, I_E=0	-32			V
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=-2.0mA, I_B=0	-32			V
Emmiter - Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10µA, 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: Tamb=25°C unless otherwise specified

Ratings & Characteristic Curves

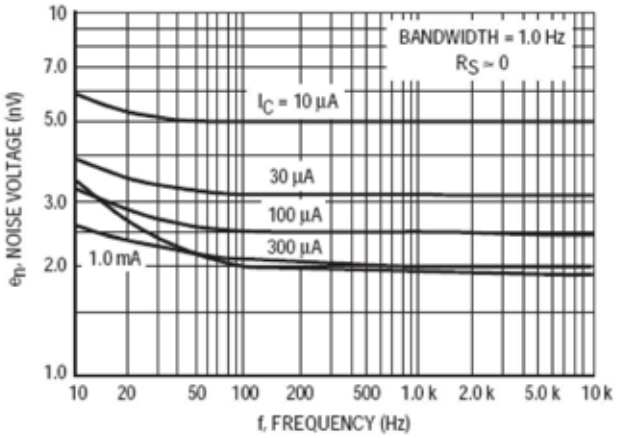


Figure 1. Noise Voltage

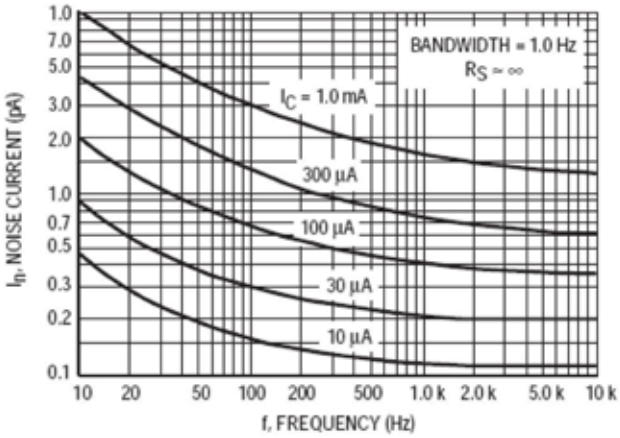


Figure 2. Noise Current

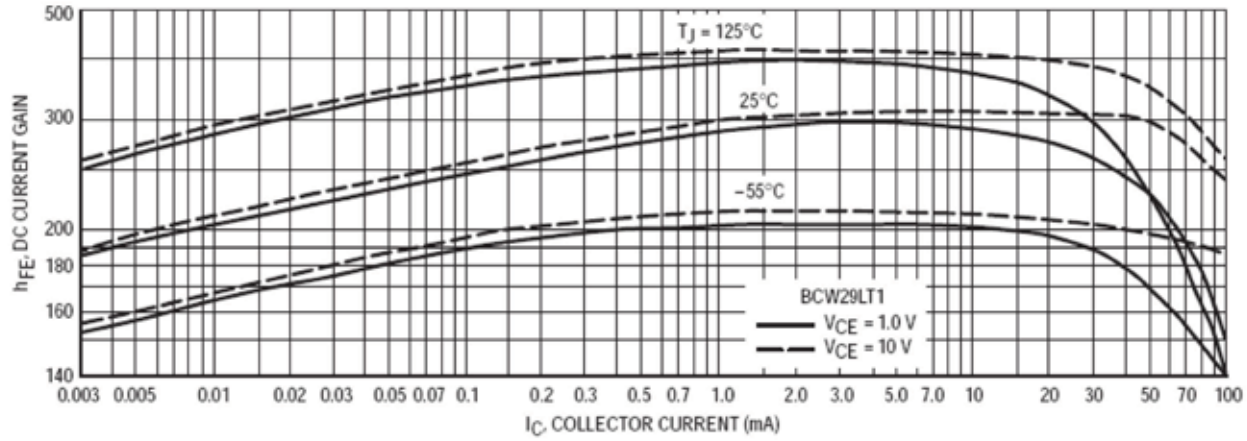
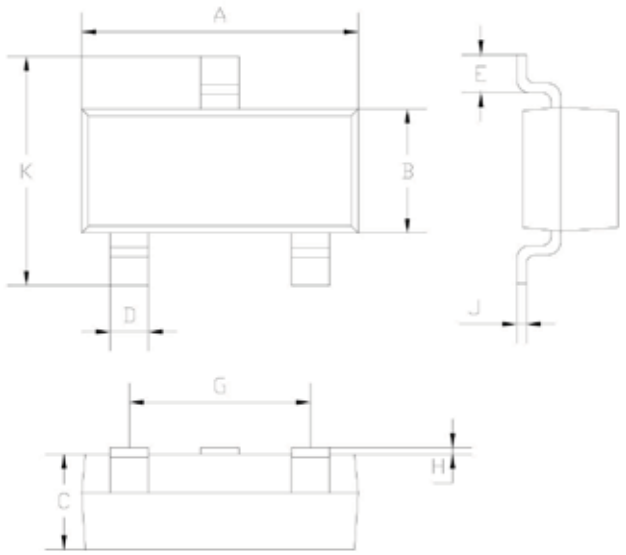


Figure 3. DC Current Gain

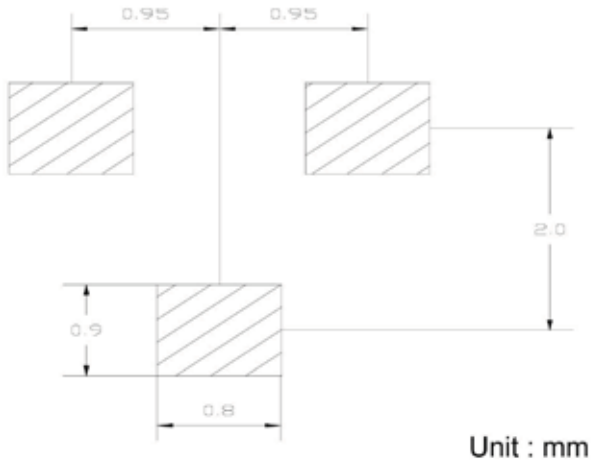
Package Outline

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1 Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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