

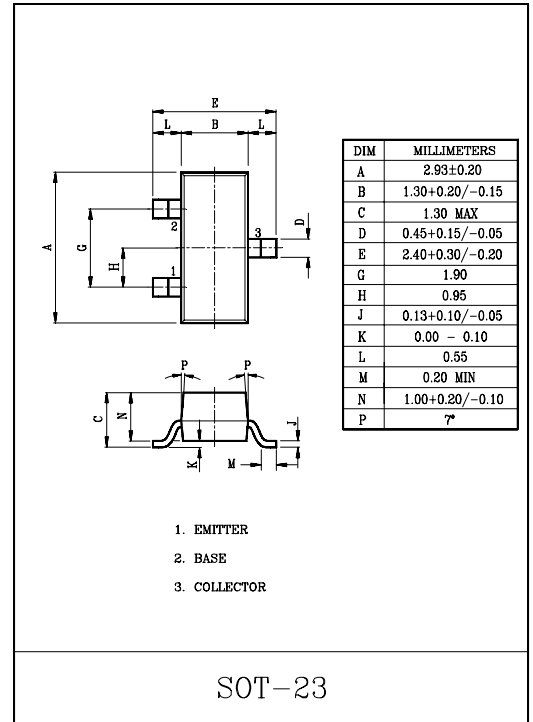
LOW LEVEL AUDIO-AMPLIFIER AND SWITCHING.

FEATURES

- Super Mini Packaged Transistor for Hybrid Circuits.
- For Complementary with PNP Type BCW69/70/89.

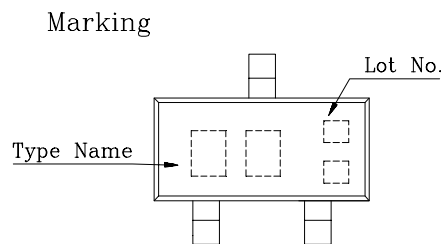
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	BCW71/72	50	V
	BCV71/72	60	
Collector-Emitter Voltage	BCW71/72	45	V
	BCV71/72	60	
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>C</sub>	100	mA
Emitter Current	I <sub>E</sub>	-100	mA
Collector Power Dissipation	P <sub>C</sub>	200	mW
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-65~150	°C



MARK SPEC

TYPE	MARK
BCW71	K 1
BCW72	K 2
BCV71	K 7
BCV72	K 8



# BCV71/72, BCW71/72

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	BCW71/72	$V_{(BR)CEO}$	$I_C=2mA, I_B=0$	45	-	-	V
	BCV71/72			60	-	-	
Collector-Base Breakdown Voltage	BCW71/72	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	50	-	-	V
	BCV71/72			60	-	-	
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5.0	-	-	V
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=20V, I_E=0$	-	-	100	nA
			$T_a=100^\circ C, V_{CB}=20V, I_E=0$	-	-	10	$\mu A$
DC Current Gain	BCW71/BCV71	$h_{FE}$	$V_{CE}=5V, I_C=10\mu A$	-	100	-	
	BCW72/BCV72			-	160	-	
	BCW71/BCV71		$V_{CE}=5V, I_C=2mA$	110	-	220	
	BCW72/BCV72			200	-	450	
Base-Emitter Voltage		$V_{BE(ON)}$	$V_{CE}=5V, I_C=2mA$	550	-	700	mV
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	750	-	mV
			$I_C=50mA, I_B=2.5mA$	-	870	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	-	250	mV
			$I_C=50mA, I_B=2.5mA$	-	230	-	
Transition Frequency		$f_T$	$I_C=10mA, V_{CE}=5V, f=100MHz$	-	300	-	MHz
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	4.0	pF
Noise Figure		NF	$I_C=0.2mA, V_{CE}=5V, \Delta f=200Hz$ $R_g=2k\Omega, f=1kHz$	-	-	10	dB