

**BCW30****PNP EPITAXIAL SILICON TRANSISTOR**

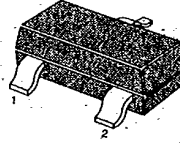
T-29-19

**GENERAL PURPOSE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	30	V
Collector-Emitter Voltage	$V_{CE0}$	20	V
Emitter-Base Voltage	$V_{EB0}$	5.0	V
Collector Current	$I_C$	100	mA
Collector Dissipation	$P_C$	350	mW
Storage Temperature	$T_{stg}$	150	$^\circ\text{C}$

• Refer to MMBT5086 for graphs

SOT-23



1. Base 2. Emitter 3. Collector

**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )**

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	30		V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C = 2.0\text{mA}, I_B = 0$	20		V
Collector-Emitter Breakdown Voltage	$BV_{CES}$	$I_C = 100\mu\text{A}, V_{EB} = 0$	30		V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	5		V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 20\text{V}, I_E = 0$		100	nA
DC Current Gain	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 2.0\text{mA}$	215	500	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 0.5\text{mA}$		0.3	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = 2.0\text{mA}, V_{CE} = 5\text{V}$	0.6	0.75	V
Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0$ $f = 1\text{MHz}$		7	pF
Noise Figure	NF	$I_C = 0.2\text{mA}, V_{CE} = 5\text{V}$ $f = 1\text{kHz}, R_S = 2\text{k}\Omega$		10	dB

Marking

