

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

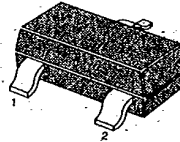
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**GENERAL PURPOSE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )**

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	$BV_{CB0}$	$I_C=10\mu\text{A}, I_E=0$	30		V
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	$I_C=2.0\text{mA}, I_B=0$	20		V
Collector-Emitter Breakdown Voltage	$BV_{CES}$	$I_C=100\mu\text{A}, V_{EB}=0$	30		V
Emitter-Base Breakdown Voltage	$BV_{EB0}$	$I_E=10\mu\text{A}, I_C=0$	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

