

BCW30

PNP EPITAXIAL SILICON TRANSISTOR

T-29-19

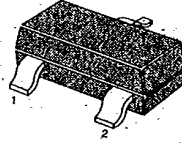
GENERAL PURPOSE TRANSISTOR

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_{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

