

SOT23 PNP SILICON PLANAR DARLINGTON TRANSISTORS

BCV26 BCV46

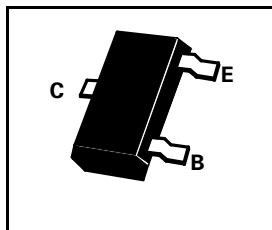
ISSUE 3 – SEPTEMBER 1995

FEATURES

- * Low saturation voltage

COMPLEMENTARY TYPE – BCV26 - BCV27
BCV46 - BCV47

PARTMARKING DETAILS – BCV26 - ZFD
BCV46 - ZFE



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	BCV26	BCV46	UNIT
Collector-Base Voltage	V_{CBO}	-40	-80	V
Collector-Emitter Voltage	V_{CEO}	-30	-60	V
Emitter-Base Voltage	V_{EBO}	-10		V
Peak Pulse Current	I_{CM}	-800		mA
Continuous Collector Current	I_C	-500		mA
Base Current	I_B	-100		mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	330		mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150		$^{\circ}C$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL	BCV26		BCV46		UNIT	CONDITIONS.
		MIN.	MAX.	MIN.	MAX.		
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-40		-80		V	$I_C=100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30		-60		V	$I_C=10mA$ *
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-10		-10		V	$I_E=10\mu A$
Collector Cut-Off Current	I_{CBO}		-100		-100	nA nA μA μA	$V_{CB} = -30V$ $V_{CB} = -60V$ $V_{CB} = -30V, T_{amb} = 150^{\circ}C$ $V_{CB} = -60V, T_{amb} = 150^{\circ}C$
Emitter Base Cut-Off Current	I_{EBO}		-100		-100	nA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-1.0		-1.0	V	$I_C = 100mA, I_B = -0.1mA$ *
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.5		-1.5	V	$I_C = 100mA, I_B = -0.1mA$ *
Static Forward Current Transfer Ratio	h_{FE}	4K 10K 20K 4K		2K 4K 10K 2K			$I_C = 100\mu A, V_{CE} = -1V \dagger$ $I_C = 10mA, V_{CE} = -5V$ * $I_C = 100mA, V_{CE} = -5V$ * $I_C = 500mA, V_{CE} = -5V$ *
Transition Frequency	f_T	200 Typical		200 Typical		MHz	$I_C = 50mA, V_{CE} = -5V$ $f = 20MHz$
Output Capacitance	C_{obo}	4.5 Typical		4.5 Typical		pF	$V_{CB} = -10V, f = 1MHz$

*Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

Spice parameter data is available upon request for these devices † Periodic Sample Test Only.