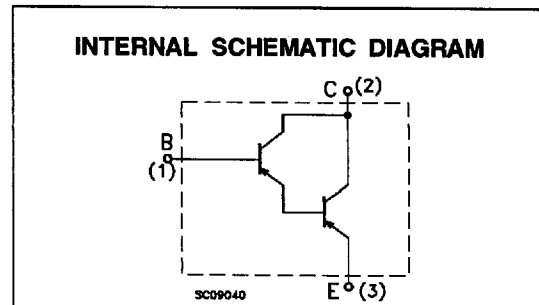
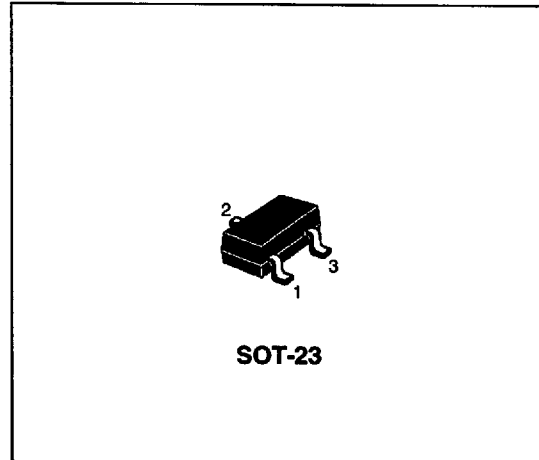


SMALL SIGNAL PNP DARLINGTON TRANSISTORS

Type	Marking
BCV26	FD
BCV46	FE

- SILICON EPITAXIAL PLANAR PNP DARLINGTON TRANSISTORS
- MINIATURE PLASTIC PACKAGE FOR APPLICATION IN SURFACE MOUNTING CIRCUITS
- GENERAL PURPOSE DARLINGTON, HIGH GAIN, HIGH INPUT IMPEDANCE
- NPN COMPLEMENTS ARE BCV27 AND BCV47



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value		Unit
		BCV26	BCV46	
V_{CBO}	Collector-Base Voltage ($I_E = 0$)	40	80	V
V_{CEO}	Collector-Emitter Voltage ($I_B = 0$)	30	60	V
V_{EBO}	Emitter-Base Voltage ($I_C = 0$)	10		V
I_C	Collector Current	0.5		A
I_{CM}	Collector Peak Current	0.8		A
P_{tot}	Total Dissipation at $T_c = 25^\circ\text{C}$	350		mW
T_{stg}	Storage Temperature	-65 to 150		$^\circ\text{C}$
T_j	Max. Operating Junction Temperature	150		$^\circ\text{C}$

BCV26/BCV46

THERMAL DATA

$R_{thj-amb}$ •	Thermal Resistance Junction-Ambient	Max	358	°C/W
R_{thj-SR} •	Thermal Resistance Junction-Substrate	Max	260	°C/W

• Mounted on a ceramic substrate area = 0.7 mm x 2.5 cm²

ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current (I _E = 0)	V _{CB} = 30 V for BCV26 V _{CB} = 60 V for BCV46			100 100	nA nA
V _{(BR)CBO} *	Collector-Emitter Breakdown Voltage (I _E = 0)	I _C = 10 µA for BCV26 I _C = 10 µA for BCV46	40 80			V V
V _{(BR)CEO} *	Collector-Emitter Breakdown Voltage (I _B = 0)	I _C = 2 mA for BCV26 I _C = 2 mA for BCV46	30 60			V V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (I _C = 0)	I _C = 100 nA	10			V
V _{CE(sat)} *	Collector-Emitter Saturation Voltage	I _C = 100 mA I _B = 0.1 mA			1	V
h _{FE} *	DC Current Gain	for BCV26 I _C = 100 µA V _{CE} = 5 V I _C = 10 mA V _{CE} = 5 V I _C = 100 mA V _{CE} = 5 V I _C = 500 mA V _{CE} = 5 V for BCV46 I _C = 100 µA V _{CE} = 5 V I _C = 10 mA V _{CE} = 5 V I _C = 100 mA V _{CE} = 5 V I _C = 500 mA V _{CE} = 5 V	4000 10000 20000 4000 2000 4000 10000 2000			
f _T	Transition Frequency	I _C = 10 mA V _{CE} = 5 V f = 100 MHz		200		MHz
C _{CB}	Collector Base Capacitance	I _E = 0 mA V _{CE} = 10 V		3.5		pF

* Pulsed: Pulse duration = 300 µs, duty cycle ≤ 2 %

SOT-23 MECHANICAL DATA

DIM.	mm			mils		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	0.85		1.1	33.4		43.3
B	0.65		0.95	25.6		37.4
C	1.20		1.4	47.2		55.1
D	2.80		3	110.2		118
E	0.95		1.05	37.4		41.3
F	1.9		2.05	74.8		80.7
G	2.1		2.5	82.6		98.4
H	0.38		0.48	14.9		18.8
L	0.3		0.6	11.8		23.6
M	0		0.1	0		3.9
N	0.3		0.65	11.8		25.6
O	0.09		0.17	3.5		6.7

