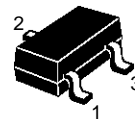


SMALL SIGNAL PNP DARLINGTON TRANSISTORS

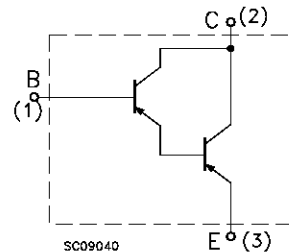
Type	Marking
BCV26	FD
BCV46	FE

- 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



SOT-23

INTERNAL SCHEMATIC DIAGRAM



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	$^{\circ}\text{C/W}$
R_{thj-SR}	Thermal Resistance Junction-Substrate	Max	260	$^{\circ}\text{C/W}$

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

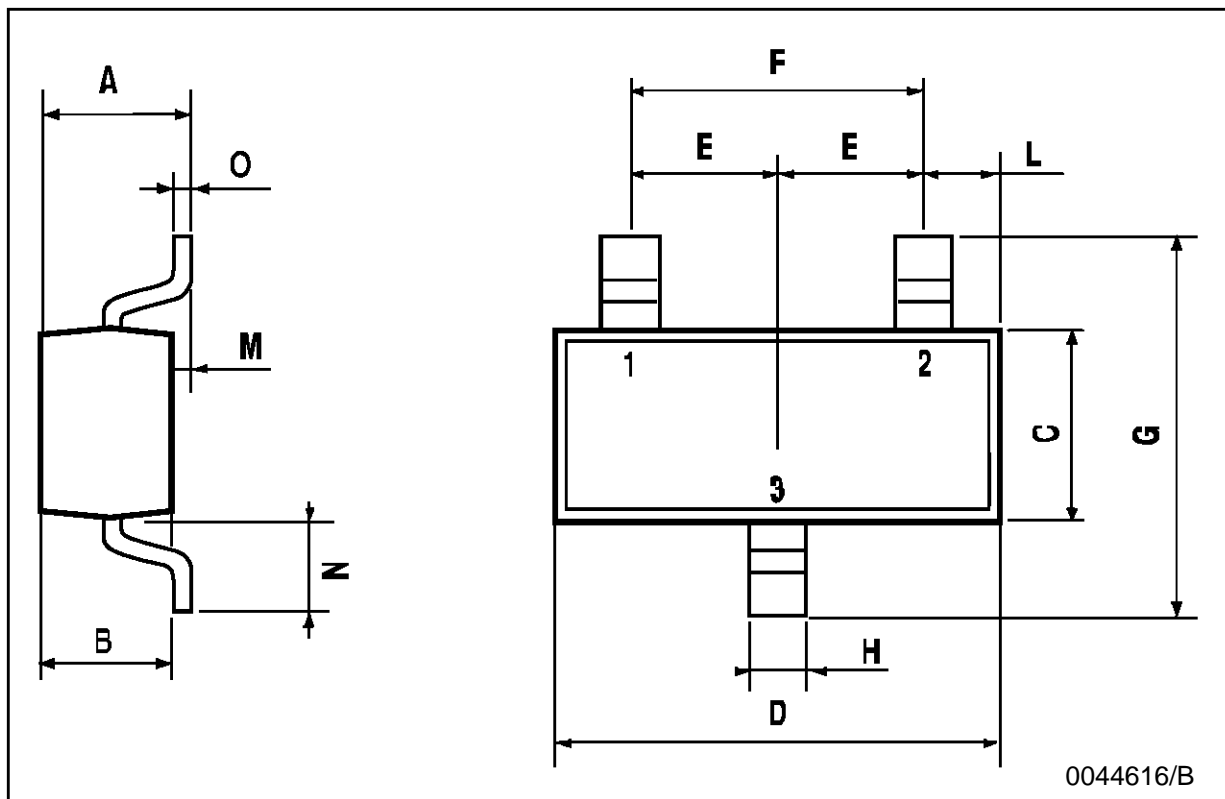
ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current ($I_E = 0$)	$V_{CB} = 30\text{ V}$ for BCV26 $V_{CB} = 60\text{ V}$ for BCV46			100 100	nA nA
$V_{(BR)CBO}^*$	Collector-Emitter Breakdown Voltage ($I_E = 0$)	$I_C = 10\ \mu\text{A}$ for BCV26 for BCV46	40 80			V V
$V_{(BR)CEO}^*$	Collector-Emitter Breakdown Voltage ($I_B = 0$)	$I_C = 2\text{ mA}$ for BCV26 for BCV46	30 60			V V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_C = 0$)	$I_C = 100\text{ nA}$	10			V
$V_{CE(sat)}^*$	Collector-Emitter Saturation Voltage	$I_C = 100\text{ mA}$ $I_B = 0.1\text{ mA}$			1	V
h_{FE}^*	DC Current Gain	for BCV26 $I_C = 100\ \mu\text{A}$ $V_{CE} = 5\text{ V}$ $I_C = 10\text{ mA}$ $V_{CE} = 5\text{ V}$ $I_C = 100\text{ mA}$ $V_{CE} = 5\text{ V}$ $I_C = 500\text{ mA}$ $V_{CE} = 5\text{ V}$ for BCV46 $I_C = 100\ \mu\text{A}$ $V_{CE} = 5\text{ V}$ $I_C = 10\text{ mA}$ $V_{CE} = 5\text{ V}$ $I_C = 100\text{ mA}$ $V_{CE} = 5\text{ V}$ $I_C = 500\text{ mA}$ $V_{CE} = 5\text{ V}$	4000 10000 20000 4000			
f_T	Transition Frequency	$I_C = 10\text{ mA}$ $V_{CE} = 5\text{ V}$ $f = 100\text{ MHz}$		200		MHz
C_{CB}	Collector Base Capacitance	$I_E = 0\text{ mA}$ $V_{CE} = 10\text{ V}$		3.5		pF

* Pulsed: Pulse duration = 300 μs , duty cycle $\leq 2\%$

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



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