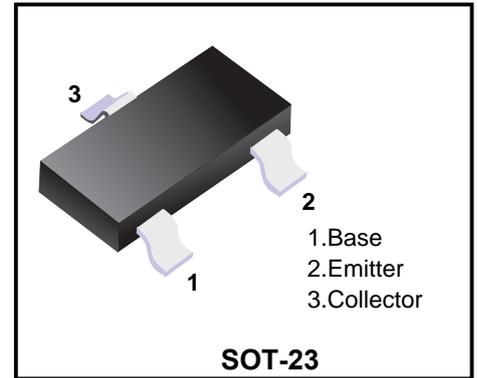


**PNP Darlington Transistors**  
for preamplifier input applications



Marking Code	
<b>BCV26</b>	<b>FD</b>
<b>BCV46</b>	<b>FE</b>

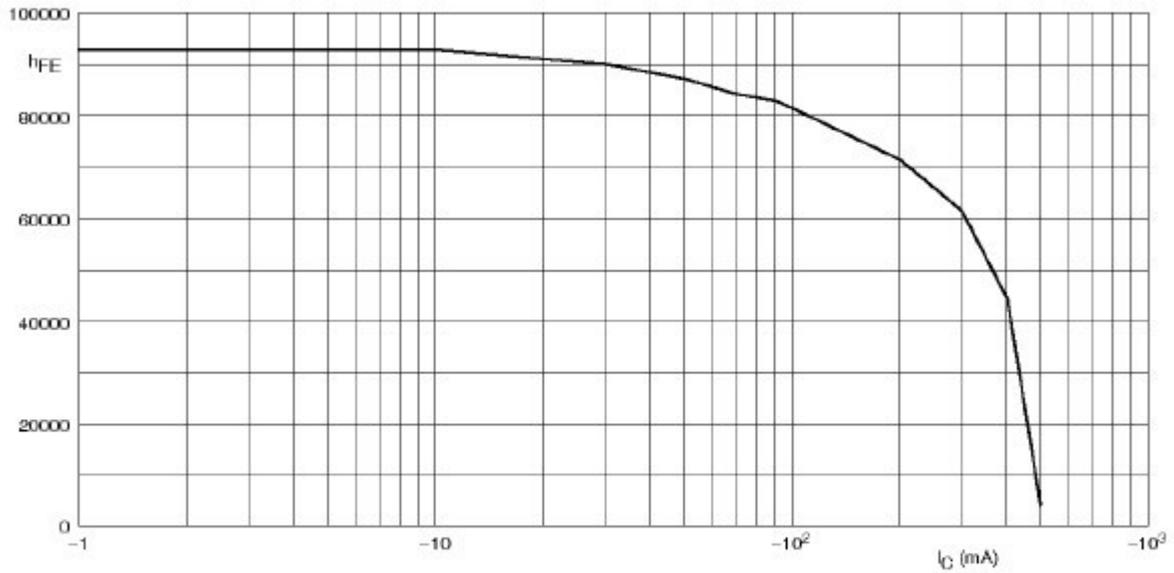
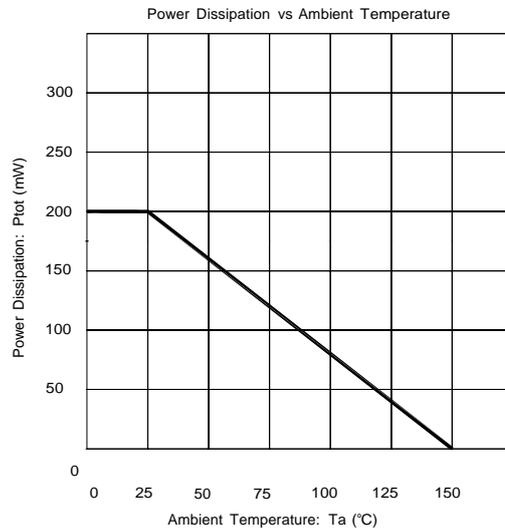
### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbols	Value	Units
Collector Base Voltage	BCV26 BCV46	-40 -80	<b>V</b>
Collector Emitter Voltage	BCV26 BCV46	-30 -60	<b>V</b>
Emitter Base Voltage		-10	<b>V</b>
Collector Current		-500	<b>mA</b>
Peak Collector Current		-800	<b>mA</b>
Base Current		-100	<b>mA</b>
Total Power Dissipation		200	<b>mW</b>
Junction Temperature		150	<b>°C</b>
Storage Temperature Range		- 65 to + 150	<b>°C</b>

### Characteristics at Ta =25°C

Parameter	Symbol	Min	Typ	Max	Unit
DC Current Gain					
at $-V_{CE} = 5\text{ V}$ , $-I_C = 1\text{ mA}$	BCV26 BCV46	$h_{FE}$ $h_{FE}$	4000 2000	- -	- -
at $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$	BCV26 BCV46	$h_{FE}$ $h_{FE}$	10000 4000	- -	- -
at $-V_{CE} = 5\text{ V}$ , $-I_C = 100\text{ mA}$	BCV26 BCV46	$h_{FE}$ $h_{FE}$	20000 10000	- -	- -
Collector Cutoff Current					
at $-V_{CB} = 30\text{ V}$	BCV26	$I_{CBO}$	-	-100	<b>nA</b>
at $-V_{CB} = 60\text{ V}$	BCV46	$I_{CBO}$	-	-100	<b>nA</b>
Emitter Cutoff Current					
at $-V_{EB} = 10\text{ V}$		$I_{EBO}$	-	-100	<b>nA</b>
Collector Base Breakdown Voltage	BCV26 BCV46	$V_{(BR)CBO}$	-40 -80	- -	<b>V</b>
Collector Emitter Breakdown Voltage	BCV26 BCV46	$V_{(BR)CEO}$	-30 -60	- -	<b>V</b>
Emitter Base Breakdown Voltage		$V_{(BR)EBO}$	-10	-	<b>V</b>
Collector Emitter Saturation Voltage		$V_{CE(sat)}$	-	-1	<b>V</b>
at $-I_C = 100\text{ mA}$ , $-I_B = 0.1\text{ mA}$		$V_{CE(sat)}$	-	-1	<b>V</b>
Base Emitter Saturation Voltage		$V_{BE(sat)}$	-	-1.5	<b>V</b>
at $-I_C = 100\text{ mA}$ , $-I_B = 0.1\text{ mA}$		$V_{BE(sat)}$	-	-1.5	<b>V</b>
Base Emitter On-state Voltage		$V_{BE(on)}$	-	-1.4	<b>V</b>
at $-I_C = 10\text{ mA}$ , $-V_{CE} = 5\text{ V}$		$V_{BE(on)}$	-	-1.4	<b>V</b>
Transition Frequency		$f_T$	-	220	<b>MHz</b>
at $-V_{CE} = 5\text{ V}$ , $-I_C = 30\text{ mA}$ , $f = 100\text{ MHz}$		$f_T$	-	220	<b>MHz</b>

Typical Characteristics



V<sub>CE</sub> = -2 V.

DC current gain; typical values.

**Ordering information**

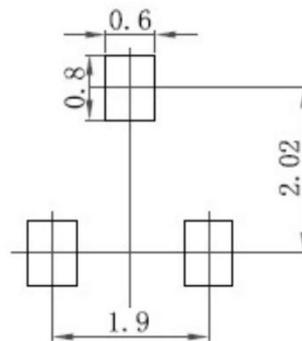
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

**Package Dimensions**

**SOT-23**

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
e	1.9		75	
e1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

**The recommended mounting pad size**



## Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.