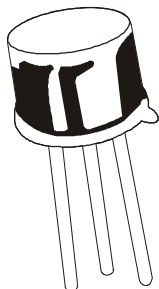


## PNP SILICON PLANAR EPITAXIAL TRANSISTORS

**BFX87**  
**BFX88**  
**TO-39**



### ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	BFX87	BFX88	UNIT
Collector -Base Voltage	VCBO	50	40	V
Collector -Emitter Voltage	VCEO	50	40	V
Collector Current (DC)	IC	600		mA
Peak value	ICM	600		mA
Emitter Current	IEM	600		mA
Power Dissipation up to Tamb=25 degC	Ptot	600		mW
Operating And Storage Junction Temperature Range	Tj, Tstg	-65 to +200		deg C

### THERMAL RESISTANCE

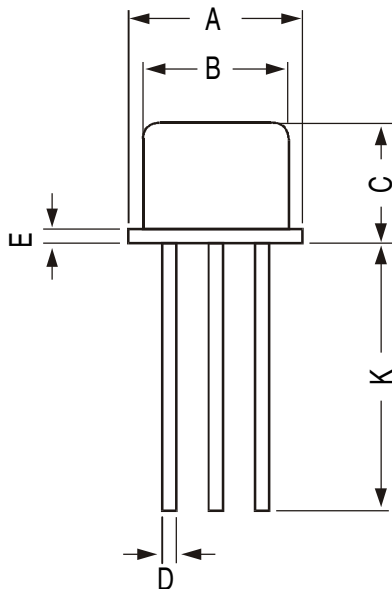
Junction to Ambient	Rth(j-a)	300		K/W
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### ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector-Cut off Current	ICBO	<b>BFX87</b>				
		VCB=40V, IE=0	-	-	50	nA
		VCB=50V, IE=0	-	-	500	nA
		Tj=100 deg C				
		VCB=40V, IE=0	-	-	2.0	uA
		<b>BFX88</b>				
Emitter-Cut off Current	IEBO	VCB=30V, IE=0	-	-	50	nA
		VCB=40V, IE=0	-	-	500	nA
		Tj=100 deg C				
		VCB=30V, IE=0	-	-	2.0	uA
		VEB=3V, IC=0	-	-	100	nA
		VEB=4V, IC=0	-	-	500	nA
DC Current Gain	hFE	IC=1mA, VCE=10V	40	-	-	
		IC=10mA, VCE=10V	40	-	-	
		IC=150mA, VCE=10V	40	-	-	
		IC=500mA, VCE=10V	25	-	-	

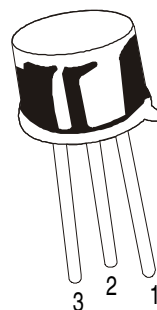
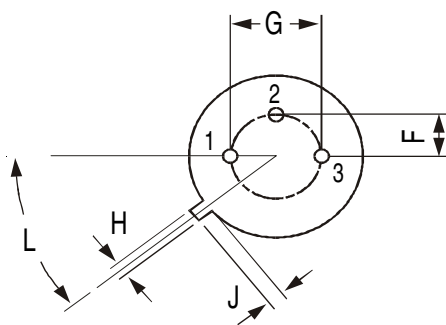
**ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)****BFX87/88**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Saturation Voltage	VCE(Sat)	IC=150mA,IB=15mA	-	-	0.4	V
Base Emitter Saturation Voltage	VBE(Sat)	IC=30mA,IB=1mA	-	-	0.9	V
		IC=150mA,IB=15mA	-	-	1.3	V
<u>Dynamic Characteristics</u>						
Collector Capacitance	Cc	VCB=10V, IE=0 f=1MHz	-	-	12	pF
Emitter Capacitance	Ce	VEB=2V, IC=0 f=1MHz	-	-	30	pF
Transition Frequency	ft	VCE=10V,IC=50mA, f=100MHz	100	-	-	MHz
<u>Switching Time</u>						
Turn on time	ton		-	-	60	ns
Turn off time	toff		-	-	150	ns
<u>h-parameters</u>						
Measured @ IC=10mA, VCE=10V, f=1kHz						
Input impedance	hie		-	600		ohms
Voltage Feedback Ratio	hre		-	1.5		x10-4
Forward Current Transfer Ratio	hfe		-	155		
Output Admittance	hoe		-	104		umho

**TO-39 Metal Can Package**

All dimensions are in mm

DIM	MIN	MAX
A	8.50	9.39
B	7.74	8.50
C	6.09	6.60
D	0.40	0.53
E	—	0.88
F	2.41	2.66
G	4.82	5.33
H	0.71	0.86
J	0.73	1.02
K	12.70	—
L	42 DEG	48 DEG

**PIN CONFIGURATION**

1. EMITTER
2. BASE
3. COLLECTOR

**Packing Detail**

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-39	500 pcs/polybag	540 gm/500 pcs	3" x 7.5" x 7.5"	20.0K	17" x 15" x 13.5"	32.0K	40 kgs

## Notes

### Disclaimer

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