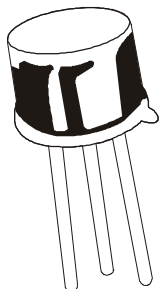


PNP SILICON PLANAR EPITAXIAL TRANSISTORS

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

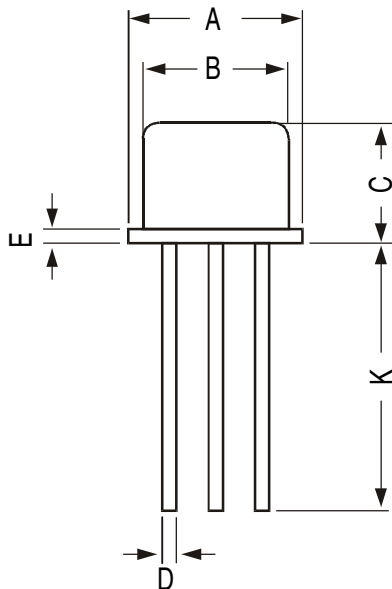
Junction to Ambient	Rth(j-a)	300		K/W
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ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector-Cut off Current	ICBO	BFX87				
		VCB=40V, IE=0	-	-	50	nA
		VCB=50V, IE=0	-	-	500	nA
		Tj=100 deg C				
		VCB=40V, IE=0	-	-	2.0	uA
		BFX88				
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	-	-	

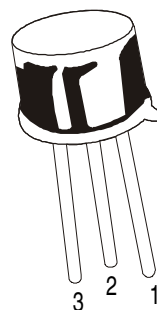
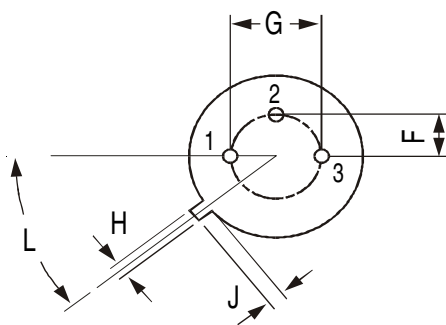
ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)**BFX87/88**

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

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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