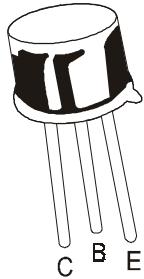


PNP SILICON PLANAR TRANSISTOR

BFX30



**TO-39
Metal Can Package**

INTENDED FOR SWITCHING APPLICATIONS.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Emitter Voltage	V_{CEO}	65	V
Collector Base Voltage	V_{CBO}	65	V
Emitter Base Voltage	V_{EBO}	5.0	V
Collector Current Continuous	I_C	600	mA
Peak	I_{CM}	600	mA
Emitter Current (Peak Value)	I_{EM}	600	mA
Total Device Dissipation @ Ta=25°C	P_{tot}	600	mW
Operating And Storage Junction Temperature Range	T_j, T_{stg}	-65 to +200	°C

THERMAL RESISTANCE

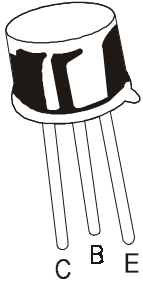
Junction to Ambient	$R_{th(j-a)}$	300	K/W
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ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	VALUE		UNITS
			MIN	MAX	
Collector Cut off Current	I_{CBO}	$V_{CB}=65V, I_E=0$		500	nA
		$V_{CB}=50V, I_E=0$		50	nA
		$V_{CB}=50V, I_E=0, T_j=100^\circ C$		2.0	μA
Emitter Cut off Current	I_{EBO}	$V_{EB}=5V, I_C=0$		500	nA
		$V_{EB}=3V, I_C=0$		100	nA
DC Current Gain	h_{FE}	$I_C=1.0mA, V_{CE}=0.4V$	40		
		$I_C=10mA, V_{CE}=0.4V$	50	200	
		$I_C=50mA, V_{CE}=0.4V$	20		
		$I_C=150mA, V_{CE}=0.4V$	10		
Base Emitter Saturation Voltage	$V_{BE(Sat)}$	$I_C=30mA, I_B=1.0mA$	0.9		V
		$I_C=150mA, I_B=15mA$	1.3		V

PNP SILICON PLANAR TRANSISTOR

BFX30

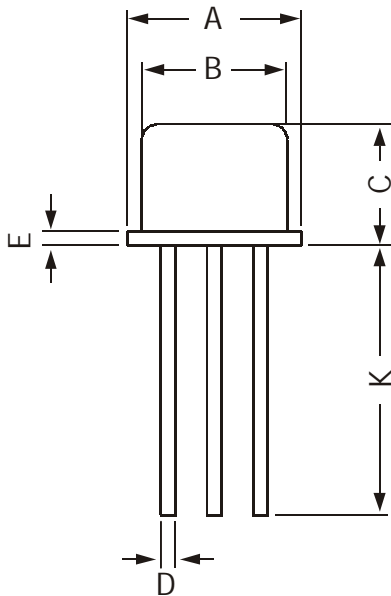


**TO-39
Metal Can Package**

ELECTRICAL CHARACTERISTICS (Ta=25° C unless specified otherwise)

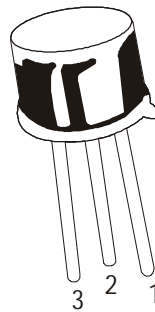
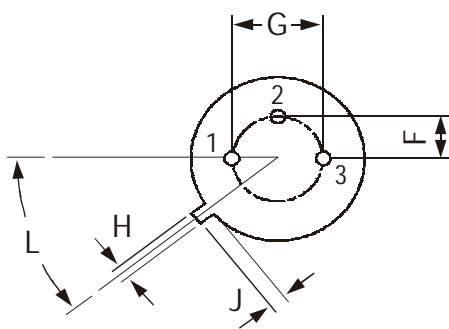
DESCRIPTION	SYMBOL	TEST CONDITION	VALUE		UNITS
			MIN	MAX	
<u>SMALL SIGNAL CHARACTERISTICS</u>					
Collector Capacitance	C_{tc}	$V_{CB}=10V, I_E=I_C=0, f=1MHz$	typ.	6.0	pF
Emitter Capacitance	C_{te}	$V_{EB}=2.0V, I_C=, f=1MHz$	typ.	18	pF
<u>SWITCHING TIMES</u>					
Delay Time	t_d			15	ns
Rise Time	t_r			40	ns
Turn on time (td+ tr)	t_{on}	$I_C=100mA, I_{Bon}=I_{Boff}=10mA$		50	ns
Storage time	t_s			250	ns
Fall time	t_f			50	ns
Turn off time (ts+tf)	t_{off}			290	ns

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"	20K	17" x 15" x 13.5"	32K	40 kgs

Disclaimer

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