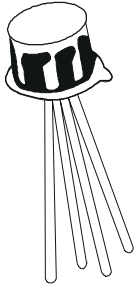


NPN SILICON PLANAR TRANSISTOR

**BFY90
TO-72**



APPLICATIONS:
Telecommunications, Wide Band UHF Amplifier & Radio Communications.

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	30	V
Collector -Emitter Voltage(RBE<50 ohms)	VCER	30	V
Collector -Emitter Voltage	VCEO	15	V
Emitter Base Voltage	VEBO	2.5	V
Collector Current	IC	25	mA
Collector Peak Current (f >1MHz)	ICM	50	mA
Power Dissipation @ Tamb=25 deg C	Ptot	200	mW
Operating And Storage Junction Temperature Range	Tj, Tstg	-65 to +200	deg C
Thermal Resistance			
Junction to Case	Rth (j-c)	580	deg C/W
Junction to Ambient	Rth (j-a)	880	deg C/W

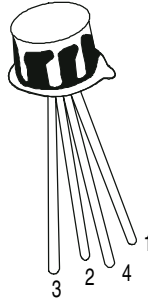
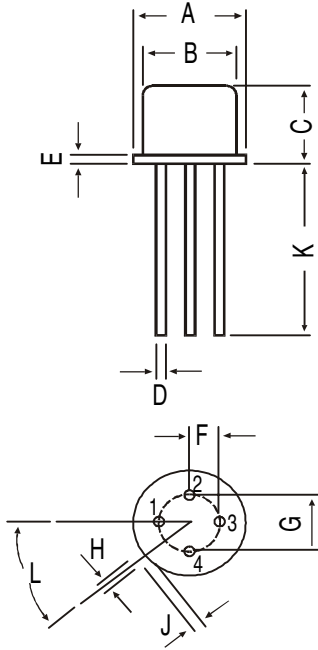
ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	ICBO	VCB=15V, IE=0	-	-	10	nA
Collector -Emitter Knee Voltage	VCEK*	IC=20mA	-	-	0.75	V
DC Current Gain	hFE	IC=2mA, VCE=1V	25	-	150	
DYNAMIC CHARACTERISTICS						
Transition Frequency	ft	IC=25mA, VCE=1V	20		125	
		IC=2mA, VCE=5V, f=200MHz	750	-	-	MHz
Collector Base Capacitance	Ccbo(1)	IC=25mA, VCE=5V, f=200MHz	750	-	-	MHz
Reverse Capacitance	Cre(2)	VCB=10V, IE=0, f=1MHz	-	-	1.5	pF
Noise Figure	NF(2)	IC=2mA, VCE=5V, f=1MHz	-	-	0.8	pF
		IC=2mA, VCE=5V, f=100kHz, RG=optimized	-		4.0	dB

*IB=Value for Which IC=22mA @ VCE=1V

- (1) Shield Lead Not Grounded
- (2) Shield Lead Grounded

TO-72 Metal Can Package



PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR
4. CASE

All dimensions in mm.

DIM	MIN.	MAX.
A	5.24	5.84
B	4.52	4.95
C	4.31	5.33
D	0.40	0.53
E	—	0.76
F	1.14	1.39
G	2.28	2.97
H	0.91	1.17
J	0.71	1.22
K	12.70	—
L	12 DEG	48 DEG

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-72	1 K/Polybag	325 gm/1K pcs	3" x 7.5" x 7.5"	5.0K	17" x 15" x 13.5"	80.0K	32 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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