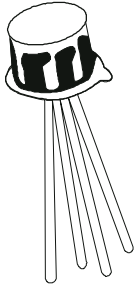


NPN SILICON PLANAR TRANSISTOR

**2N5179
TO-72**



Low Noise Tuned Amplifiers.

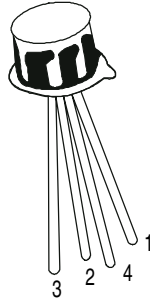
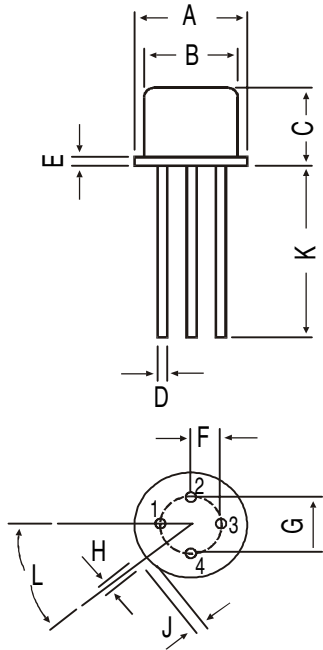
ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	20	V
Collector -Emitter Voltage	VCEO	12	V
Emitter Base Voltage	VEBO	2.5	V
Collector Current	IC	50	mA
Power Dissipation @ Ta=25 deg C	Ptot	200	mW
@ Tc=25 deg C		300	mW
Operating And Storage Junction Temperature Range	Tj, Tstg	-65 to +200	deg C
Thermal Resistance Junction to Case	Rth (j-c)	583	deg C/W
Junction to Ambient	Rth (j-a)	875	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 Ta=150 deg C	-	-	20	nA
		VCB=15V, IE=0	-	-	1.0	uA
Collector -Base Voltage	VCBO	IC=1uA, IE=0	20	-	-	V
Collector -Emitter Voltage	VCEO(sus)	IC=3mA, IB=0	12	-	-	V
Emitter Base Voltage	VEBO	IE=10uA, IC=0	2.5	-	-	V
Collector Emitter Saturation Voltage	VCE(Sat)	IC=10mA, IB=1mA	-	-	0.40	V
Base Emitter Saturation Voltage	VBE(Sat)	IC=10mA, IB=1mA	-	-	1.0	V
DC Current Gain	hFE	IC=3mA, VCE=1V	25	-	250	
DYNAMIC CHARACTERISTICS						
Forward Current Transfer Ratio	hfe	IC=2mA, VCE=6V, f=1kHz	25	-	300	
	ft	IC=5mA, VCE=6V, f=100MHz	900	-	2000	MHz
Out-Put Capacitance	Cob	VCB=10V, IE=0, f=1MHz	-	-	1.0	pF
In-Put Capacitance	Cib	VEB=0.5V, IC=0, f=1MHz	-	-	2.0	pF
Collector Base Time Constant	rbb' Cb' c	IC=2mA, VCE=6V, f=31.9MHz	3.0	-	14	ps
Small-Signal Power Gain	Gp	IC=5mA, VCE=12V, f=200MHz	15	-	-	dB
Common Emitter Oscillator Power Output	Po	IE= -12mA, VCB=10V, f=>500MHz	20	-	-	mW

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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