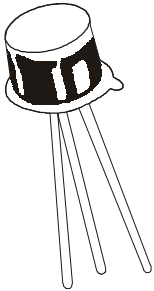


NPN SILICON PLANAR TRANSISTOR

**2N2484
TO-18**



This transistors is primarily intended for use in high performance, low level, low noise amplifier applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Emitter Voltage	VCEO	60	V
Collector -Base Voltage	VCBO	60	V
Emitter -Base Voltage	VEBO	6.0	V
Collector Current Continuous	IC	50	mA
Power Dissipation @Ta=25 degC	PD	360	mW
Derate Above 25 deg C		2.06	mw/deg C
Power Dissipation @Tc=25 degC	PD	1.20	W
Derate Above 25 deg C		6.85	mw/deg C
Operating And Storage Junction Temperature Range	Tj, Tstg	-65 to +200	deg C
THERMAL RESISTANCE			
Junction to Case	Rth(j-c)	146	deg C/W
Junction to Ambient in Free Air	Rth(j-a) *	485	deg C/W
Lead Temperature 1/16" from Case for 10 Seconds	TL	300	deg C

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

DESCRIPTION	SYMBOL	TEST CONDITION	Min	MAX	UNIT
Collector -Emitter Voltage	VCEO**	IC=10mA, IB=0	60	-	V
Collector -Base Voltage	VCBO	IC=10uA, IE=0	60	-	V
Emitter -Base Voltage	VEBO	IE=10uA, IC=-0	6.0	-	V
Collector-Cut off Current	ICBO	VCB=45V, IE=0	-	10	nA
		Ta=150 deg C VCB=45V, IE=0	-	10	uA
Emitter-Cut off Current	IEBO	VEB=5V, IC=0	-	10	nA
Collector Emitter Saturation Voltage	VCE(Sat)	IC=1mA, IB=0.1mA	-	0.35	V
Base Emitter on Voltage	VBE(on)	IC=0.1mA, VCE=5V	0.5	0.7	V

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)**2N2484**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT	
DC Current Gain	hFE	IC=1uA, VCE=5V	30	-		
		IC=10uA, VCE=5V	100	500		
		Ta=55 deg C				
		IC=10uA, VCE=5V	20	-		
		IC=100uA, VCE=5V	175	-		
		IC=500uA, VCE=5V	200	-		
		IC=1mA, VCE=5V	250	-		
		IC=10mA, VCE=5V**	-	800		
<u>Dynamic Characteristics</u>						
Transition Frequency	ft	VCE=5V, IC=0.05mA f=5MHz	15	-	MHz	
		VCE=5V, IC=0.5mA, f=30MHz	60	-	MHz	
Out-put Capacitance	Cobo	VCB=5V, IE=0 f=140kHz	-	6.0	pF	
In-put Capacitance	Cibo	VEB=0.5V, IC=0 f=140kHz	-	6.0	pF	
Noise Figure	NF	VCE=5V, IC=10uA Rs=10kohms f=100Hz, BW'=20Hz	-	10	dB	
		f=1kHz, BW=200Hz	-	3.0	dB	
		f=10kHz, BW=2kHz	-	2.0	dB	
		f=10Hz to 15.7kHz, BW=15.7KHz	-	3.0	dB	

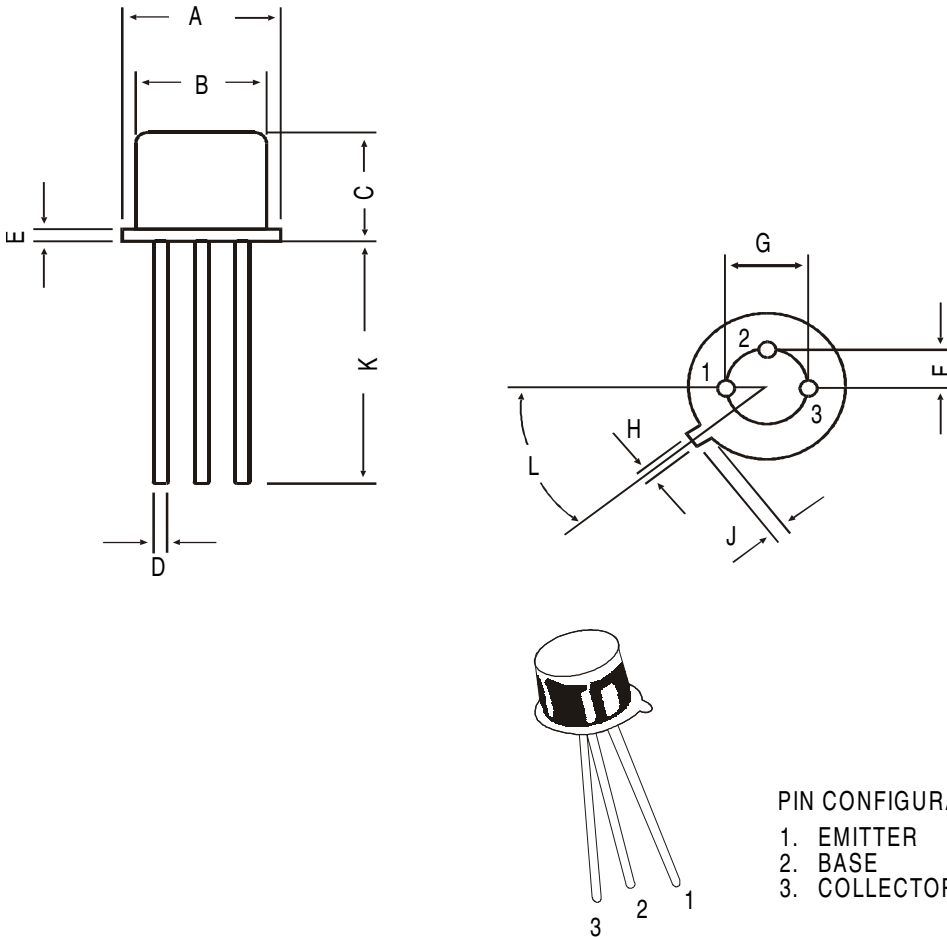
Small Signal Characteristics (@ f=1kHz unless otherwise specified)

Input Impedence	hie	IC=1mA, VCE=5V	3.5	24	kohms -4
Voltage Feedback Ratio	hre	IC=1mA, VCE=5V	-	800	x10
Small Signal Current Gain	hfe	IC=1mA, VCE=5V	150	900	
Output Admittance	hoe	IC=1mA, VCE=5V	-	40	umhos

*Rth(j-a) is measured with the device soldered into a typical printed Circuit board.

**Pulse Test: Pulse Width=300us, Duty Cycle=2%

TO-18 Metal Can Package



DIM	MIN	MAX
A	5.24	5.84
B	4.52	4.97
C	4.31	5.33
D	0.40	0.53
E	—	0.76
F	—	1.27
G	—	2.97
H	0.91	1.17
J	0.71	1.21
K	12.70	—
L	45 DEG	

All dimensions in mm.

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-18	1K/polybag	350 gm/1K pcs	3" x 7.5" x 7.5"	5.0K	17" x 15" x 13.5"	80.0K	34 kgs

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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