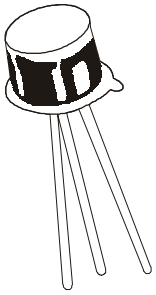
NPN SILICON PLANAR TRANSISTOR

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

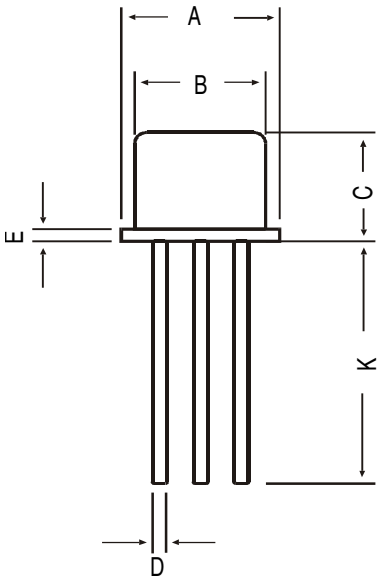
ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)

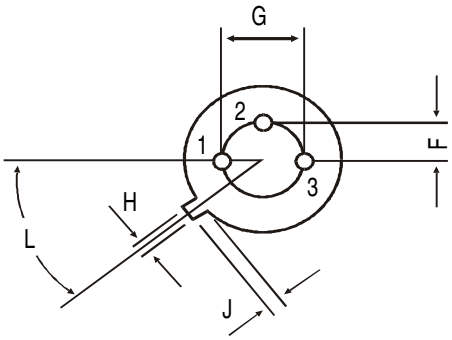
DESCRIPTION	SYMBOL	TEST CONDITION	Min	MAX	UNIT
Collector -Emitter Voltage	VCEO**	IC=10mA,IB=0	60	-	V
Collector -Base Voltage	VCBO	IC=10uA.IE=0	60	-	V
Emitter -Base Voltage	VEBO	IE=10uA, IC=-0	6.0	-	V
Collector-Cut off Current	ICBO	VCB=45V, IE=0	-	10	nA
		Ta=150 deg C VCB=45V, IE=0	-	10	uA
Emitter-Cut 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	
Dynamic Characteristics					
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
Voltage Feedback Ratio	hre	IC=1mA, VCE=5V	-	800	-4 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%**

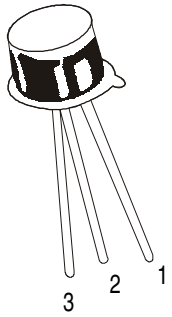
TO-18 Metal Can Package





All diminsions in mm.

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	



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

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