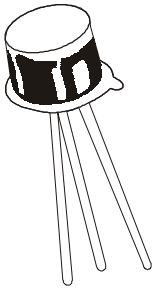
PNP SILICON PLANAR SWITCHING TRANSISTORS

2N2906A
2N2907A
TO-18



Switching And Linear Application DC to VHF Amplifier Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	2N2906A, 07A	UNIT
Collector -Emitter Voltage	VCEO	60	V
Collector -Base Voltage	VCBO	60	V
Emitter -Base Voltage	VEBO	5.0	V
Collector Current Continuous	IC	600	mA
Power Dissipation @Ta=25 degC	PD	400	mW
Derate Above 25deg C		2.28	mW/deg C
@ Tc=25 degC	PD	1.8	W
Derate Above 25deg C		10.3	mW/deg C
Operating And Storage Junction Temperature Range	Tj, Tstg		deg C

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

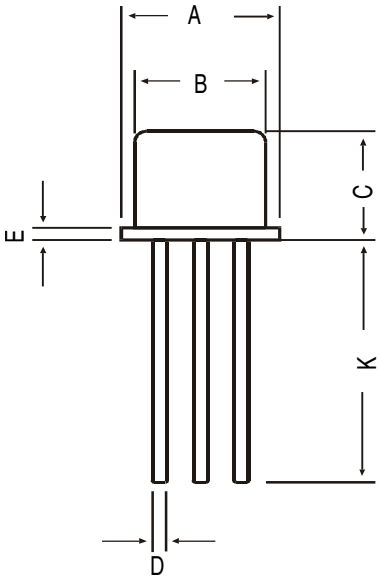
DESCRIPTION	SYMBOL	TEST CONDITION	VALUE		UNIT
			MIN	MAX	
Collector -Emitter Voltage	VCEO*	IC=10mA,IB=0	60	-	V
Collector -Base Voltage	VCBO	IC=10uA.IE=0	60	-	V
Emitter-Base Voltage	VEBO	IE=10uA, IC=0	5.0	-	V
Collector-Cut off Current	ICBO	VCB=50V, IE=0	-	10	nA
		Ta=150 deg C			
		VCB=50V, IE=0	-	10	uA
	ICEX	VCE=30V, VBE=0.5V	-	50	nA
Base Current	IB	VCE=30V, VBE=0.5V	-	50	nA
Collector Emitter Saturation Voltage	VCE(Sat)*	IC=150mA,IB=15mA	-	0.4	V
		IC=500mA,IB=50mA		1.6	V
Base Emitter Saturation Voltage	VBE(Sat) *	IC=150mA,IB=15mA	-	1.3	V
		IC=500mA,IB=50mA	-	2.6	V
			2N2906A	**2N2907A**	
DC Current Gain	hFE	IC=0.1mA,VCE=10V	>40	>75	
		IC=1mA,VCE=10V	>40	>100	
		IC=10mA,VCE=10V	>40	>100	
		IC=150mA,VCE=10V*	40-120	100-300	
		IC=500mA,VCE=10V*	>40	>50	

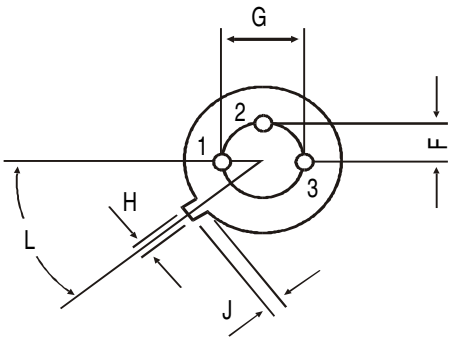
ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)			2N2906A-07A		
DESCRIPTION	**SYMBOL**	**TEST CONDITION**	**MIN**	**MAX**	**UNIT**
DYNAMIC CHARACTERISTICS					
Transition Frequency	ft **	IC=50mA, VCE=20V,f=100MHz	200	-	MHz
Out-Put Capacitance	Cob	VCB=10V, IE=0,f=100kHz	-	8.0	pF
Input Capacitance	Cib	VBE=2V, IC=0, f=100kHz	-	30	pF
Switching Time					
Delay time	td	IC=150mA,IB1=15mA	-	10	ns
Rise time	tr	VCC=30V	-	40	ns
Turn-On Time	ton			45	ns
Storage time	ts	IC=150mA, IB1=IB2=15mA	-	80	ns
Fall time	tf	VCC=6V	-	30	ns
Turn-Off Time	toff		-	100	ns

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

****ft is defined as the frequency at which \hfe/ extrapolates to unity**

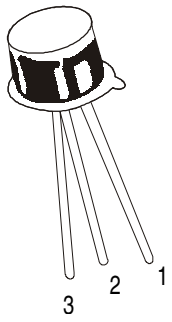
TO-18 Metal Can Package





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 diminsions 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