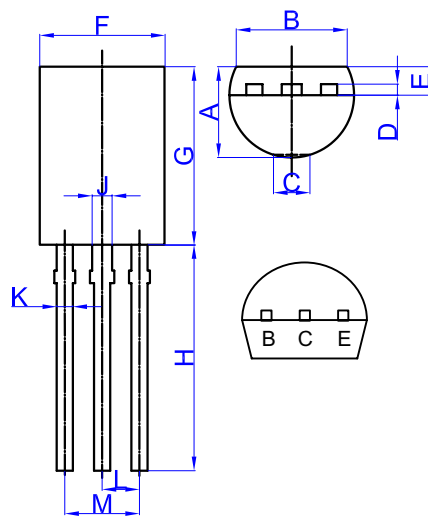




# 2SB647L

## PNP Plastic-Encapsulate Transistor

### TO-92L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.146	.161	3.700	4.10	
B	.157	---	4.000	---	
C	---	<b>0.063</b>	---	<b>1.600</b>	
D	.014	.018	0.350	0.450	
E	.050	.062	1.280	1.580	
F	.185	.201	4.700	5.100	
G	.307	.323	7.800	8.200	
H	.543	.559	13.80	14.20	
J	.024	.031	.600	.800	
K	.014	.022	0.350	.550	
L	---	.050	---	1.270	
M	.096	.104	2.440	2.640	

## Features

- Low Frequency Power Amplifier
- Complementary Pair with 2SD667
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates)
- Compliant. See ordering information)

## Maximum Ratings

Symbol	Rating	Rating	Unit
V <sub>CEO</sub>	Collector-Emitter Voltage	-80	V
V <sub>CBO</sub>	Collector-Base Voltage	-120	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5.0	V
I <sub>C</sub>	Collector Current	-1	A
P <sub>C</sub>	Collector Power Dissipation	750	mW
R <sub>thJA</sub>	Thermal Resistance Junction to Ambient	167	°C/W
T <sub>J</sub>	Operating Junction Temperature	-55 to +150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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### OFF CHARACTERISTICS

V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =-10μAdc, I <sub>E</sub> =0)	-120	---	---	Vdc
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =-1mAdc, I <sub>B</sub> =0)	-80	---	---	Vdc
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage (I <sub>E</sub> =-10μAdc, I <sub>C</sub> =0)	-5.0	---	---	Vdc
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =-100Vdc, I <sub>E</sub> =0)	---	---	-10	μAdc

### ON CHARACTERISTICS

h <sub>FE</sub>	DC Current gain <sup>(1)</sup> (I <sub>C</sub> =-150mAdc, V <sub>CE</sub> =-5Vdc) (I <sub>C</sub> =-500mAdc, V <sub>CE</sub> =-5Vdc)	60	---	320	---
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =-500mAdc, I <sub>B</sub> =-50mAdc)	---	---	-1.0	Vdc
V <sub>BE</sub>	Base- Emitter Voltage (I <sub>C</sub> =-150mAdc, V <sub>CE</sub> =-5Vdc)	---	---	-1.5	Vdc
f <sub>T</sub>	Transistor Frequency (I <sub>C</sub> =-150mAdc, V <sub>CE</sub> =-5Vdc)	---	140	---	MHz
C <sub>ob</sub>	Collector Output Capacitance (V <sub>CB</sub> =-10Vdc, I <sub>E</sub> =0, f=1.0MHz)	---	20	---	pF

(1) h<sub>FE</sub> Classification B: 60-120, C: 100-200, D: 160-320



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### Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

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