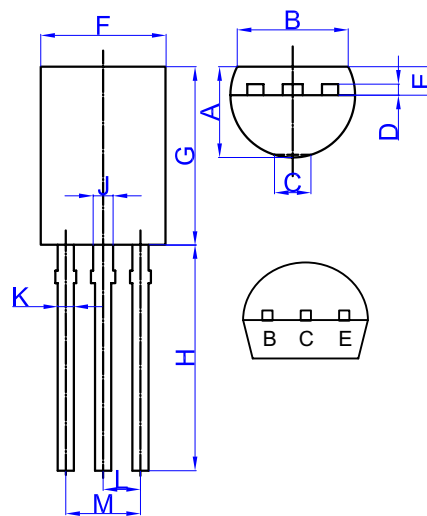




## 2SB647L

### PNP Plastic-Encapsulate Transistor

TO-92L



DIMENSIONS					
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
$V_{CEO}$	Collector-Emitter Voltage	-80	V
$V_{CBO}$	Collector-Base Voltage	-120	V
$V_{EBO}$	Emitter-Base Voltage	-5.0	V
$I_C$	Collector Current	-1	A
$P_C$	Collector Power Dissipation	750	mW
$R_{thJA}$	Thermal Resistance Junction to Ambient	167	°C/W
$T_J$	Operating Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
<b>OFF CHARACTERISTICS</b>					
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C = -10\mu A$ , $I_E = 0$ )	-120	---	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C = -1mA$ , $I_B = 0$ )	-80	---	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E = -10\mu A$ , $I_C = 0$ )	-5.0	---	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB} = -100Vdc$ , $I_E = 0$ )	---	---	-10	$\mu A$

## ON CHARACTERISTICS

$h_{FE}$	DC Current gain <sup>(1)</sup> ( $I_C = -150mA$ , $V_{CE} = -5Vdc$ ) ( $I_C = -500mA$ , $V_{CE} = -5Vdc$ )	60 30	---	320	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C = -500mA$ , $I_B = -50mA$ )	---	---	-1.0	Vdc
$V_{BE}$	Base- Emitter Voltage ( $I_C = -150mA$ , $V_{CE} = -5Vdc$ )	---	---	-1.5	Vdc
$f_T$	Transistor Frequency ( $I_C = -150mA$ , $V_{CE} = -5Vdc$ )	---	140	---	MHz
$C_{ob}$	Collector Output Capacitance ( $V_{CB} = -10Vdc$ , $I_E = 0$ , $f = 1.0MHz$ )	---	20	---	pF

(1)  $h_{FE}$  Classification B: 60~120, C: 100~200, D: 160~320

## Ordering Information :

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

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