

**Micro Commercial Components** 



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## 2SD667L

NPN

**Plastic-Encapsulate** 

Transistor

**TO-92L** 

В С E

T

DIMENSIONS

### **Features**

- Low Frequency Power Amplifier
- Complementary Pair with 2SB647/A
- 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
lc	Collector Current	1	Α
Pc	Collector Power Dissipation	900	mW
R <sub>thJA</sub>	Thermal Resistance Junction to Ambient	139	°C/W
TJ	Operating Junction Temperature	-55 to +150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

#### Electrical Characteristics @ 25°C Unless Otherwise Specified Min Typ Max Units

Symbol Parameter

OFF CHARACTERISTICS					
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>c</sub> =10uAdc,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> =10uAdc,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	uAdc
I <sub>EBO</sub>	Emitter Cutoff Current $(V_{EB}=4.0Vdc, I_{C}=0)$			10	uAdc

#### **ON CHARACTERISTICS**

h <sub>FE</sub>	DC Current gain <sup>(1)</sup> (I <sub>C</sub> =150mAdc, V <sub>CE</sub> =5Vdc)	60		320	
	(I <sub>c</sub> =500mAdc, V <sub>CE</sub> =5Vdc)	30			
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⊤	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)		12		pF

MIN DIM MAX MA MIN .146 161 3.700 4.10 А .157 4.000 В 0.063 1.600 С .014 0.450 D .018 0.350 E .050 .062 1.280 4.700 1.580 5.100 .185 .201 .323 7.800 G .307 8.200 Н .543 .559 13.80 14.20 .024 .031 .600 .800 J 0.350 550 .014 .022 L Μ .096 2.640 .104 2.440

INCHES

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

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#### **Revision:** A

NOTE



### **Ordering Information :**

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

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