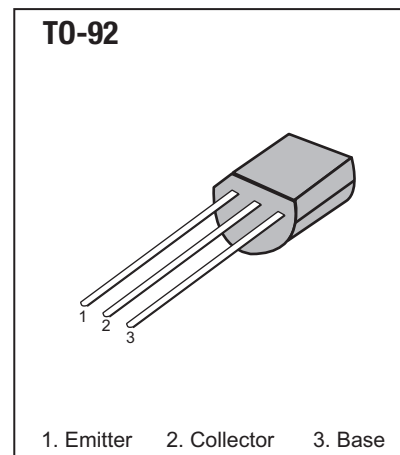
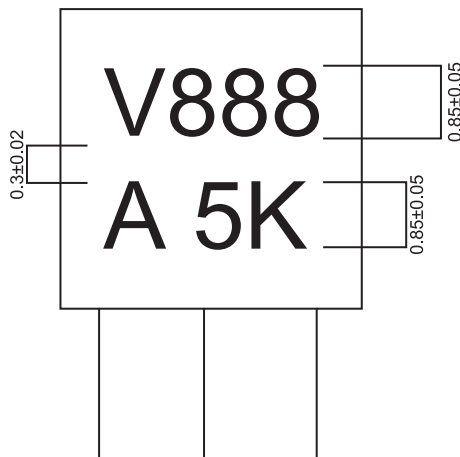


### 1. Ultra Low-Noise Audio Amplifier Applications

The 2SV888 is a PNP epitaxial transistor which has been optimized for use in audio applications. The ultra-low input voltage noise of the 2SV888 is typically only 0.3 dB over the entire audio bandwidth of 20 Hz to 20 kHz. Its ultra-low noise, high bandwidth and high current gain make the 2SV888 an ideal choice for demanding ultra-low noise preamplifier applications.

### 2. Ultra Low-Noise Audio Amplifier Applications

- **Low-noise:  $NF=2dB$ (typ.)  $R_G=100\Omega$ ,  $V_{CE}=6V$ ,  $I_c=100\mu A$ ,  $f=1kHz$   
:  $NF=0.3dB$ (typ.)  $R_G=1k\Omega$ ,  $V_{CE}=6V$ ,  $I_c=100\mu A$ ,  $f=1kHz$**
- **High DC current gain:  $H_{FE}=200-700$**
- **High breakdown voltage:  $V_{CEO}=-120V$**
- **Low pulse noise. Low  $1/f$  noise**



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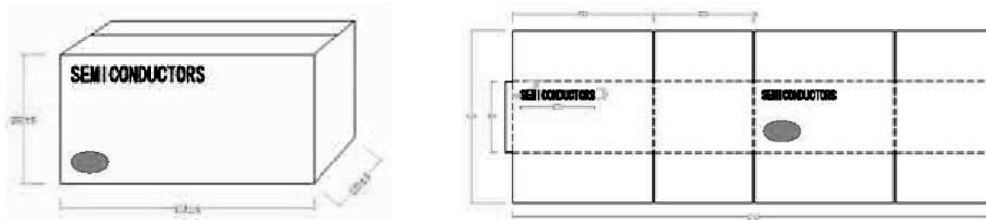
### 3. Absolute Maximum Ratings (T<sub>a</sub>=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	-120	V
Collector-Emitter Voltage	V <sub>CE0</sub>	-120	V
Emitter-Base Voltage	V <sub>EB0</sub>	-5	V
Collector Current (DC)	I <sub>C</sub>	-100	mA
Base Current (DC)	I <sub>B</sub>	-20	mA
Collector Dissipation	P <sub>C</sub>	300	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55-150	°C

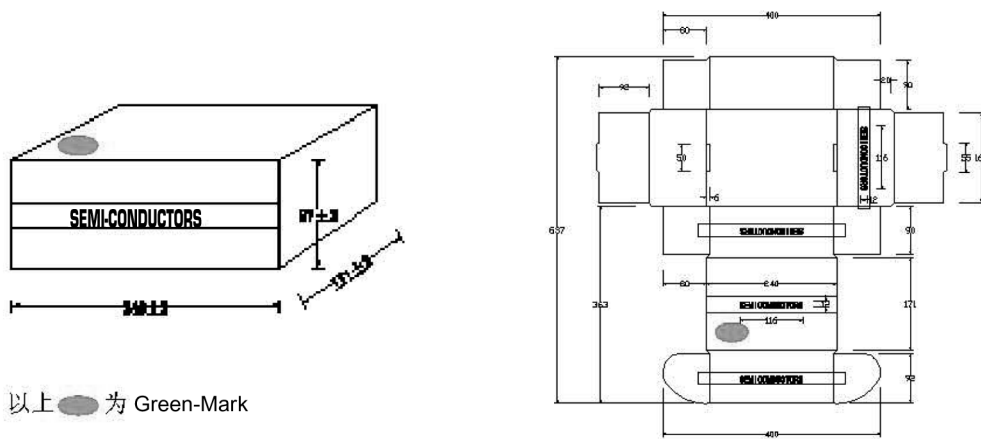
### 4. Electrical Characteristics (T<sub>a</sub>=25°C)


Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> =-120V, I <sub>E</sub> =0			-0.1	µA
Emitter Cut-off Current	I <sub>EB0</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-0.1	µA
Collector-Emitter Breakdown Voltage	BV <sub>CE0</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-120			V
Emitter-Base Breakdown Voltage	BV <sub>EB0</sub>	I <sub>E</sub> =-100µA, I <sub>C</sub> =0	-5			V
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	I <sub>C</sub> =-100µA, I <sub>E</sub> =0	-120			V
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-10mA, I <sub>B</sub> =-1mA			-0.3	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-2mA		-0.65		V
DC Current Gain	H <sub>FE1</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-2mA	200		700	
Current Gain Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-1mA		100		MHz
Output Capacitance	C <sub>OB</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz		4.0		pF
Noise Figure	NF	V <sub>CE</sub> =-6V, I <sub>C</sub> =-0.1mA, f=10Hz, R <sub>G</sub> =10k Ω			4	dB
		V <sub>CE</sub> =-6V, I <sub>C</sub> =-0.1mA, f=1kHz, R <sub>G</sub> =10k Ω			1.2	
		V <sub>CE</sub> =-6V, I <sub>C</sub> =-0.1mA, f=1kHz, R <sub>G</sub> =100 Ω		2		

**a. Box1**



**b. Box2**



以上  为 Green-Mark

	Plastic Bag	Box		
		Bags/Box2	Box2/Box1	Pcs/Box1
Packing	Pcs/Bag			
2SA970GR	1000	10	10	100,000

**c. Green-Mark**



Name of the Part	Material Weight (mg/unit)	Material Name	Material Analysis (element)	Material Analysis (weight%)
Leadframe	27	PMC	Fe Zn P Cu	2.4% 0.03% 0.12% 97.45%
Plastic	47	Epoxy Resin	Epoxy Resin SiO <sub>2</sub> 酚醛 脱膜剂 其它微量元素	15% 73% 8% <1% 约3%
Chip	1.25	Doped Silicon	Si Al	99.4% 0.6%
Wires	5	Gold	Au	99.99
Leads Finishing	0.25	Lead-Free	Pb<100ppm	