

/ Descriptions

Silicon PNP transistor in a TO-18 Plastic Package.

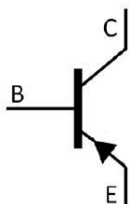
/ Features

Complementary pair with 2SC1162.

/ Applications

Low frequency power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	60 120	100 200	160 320

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-35	V
Collector to Emitter Voltage	V_{CEO}	-35	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-2.5	A
Peak Collector Current	I_{CP}	-3.0	A
Collector Power Dissipation	P_C	750	mW
Collector Power Dissipation	$P_C(T_c=25^\circ C)$	10	W
Junction Temperature	T_j	150	$^{\circ}C$

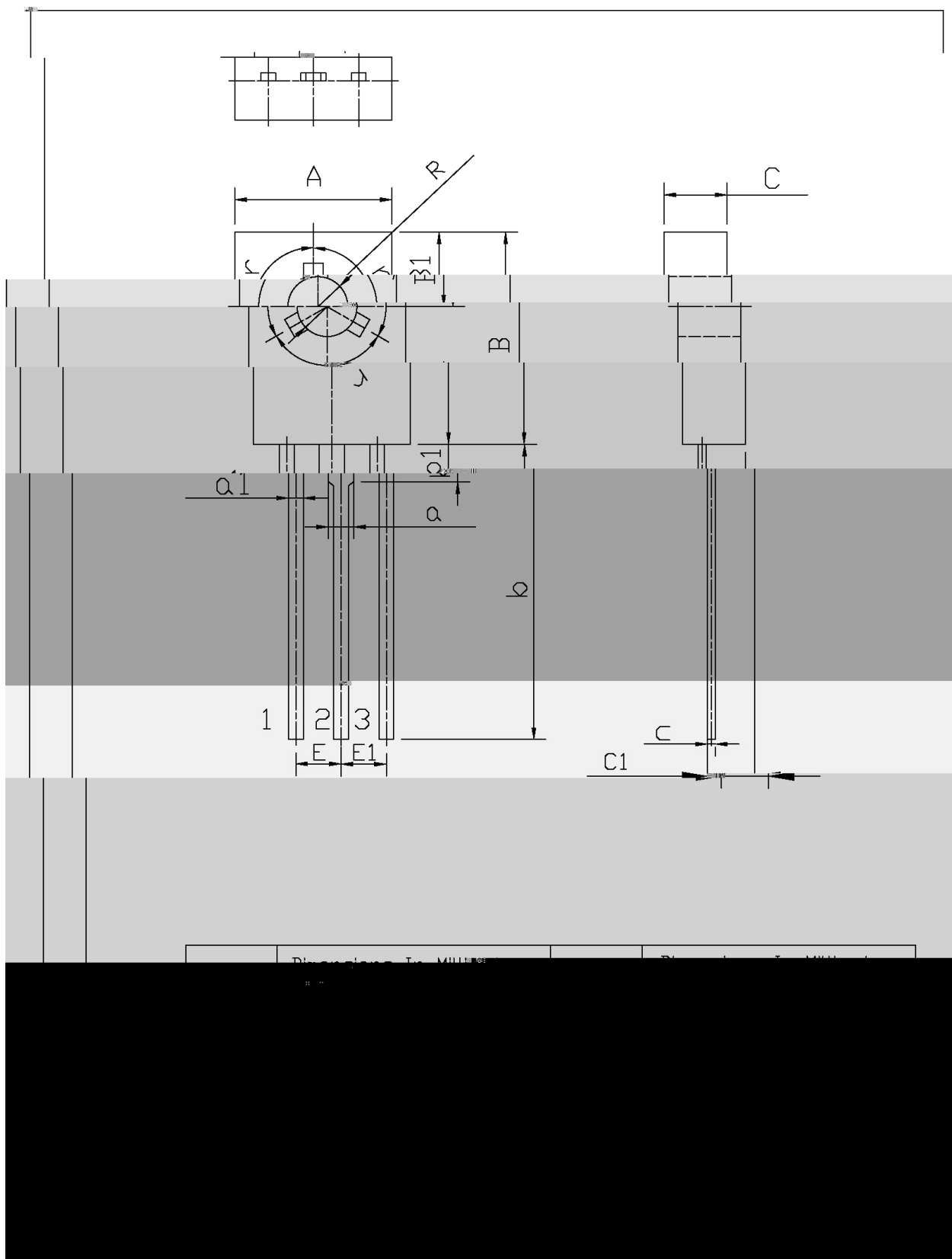
The figure consists of six graphs showing the characteristics of the 2N3055A NPN power transistor:

- PC - TC:** Power dissipation (P_C in W) vs. case temperature (T_C in $^{\circ}\text{C}$). The graph shows a linear relationship where P_C decreases from approximately 10 W at $T_C = 25^{\circ}\text{C}$ to 0 W at $T_C = 150^{\circ}\text{C}$.
- IC - VCE:** Collector current (I_C in A) vs. collector-emitter voltage (V_{CE} in V) for various base currents (I_B in mA). The curves are shown for $T_C = 25^{\circ}\text{C}$ and $I_B = 0$. The curves show that I_C increases with I_B and V_{CE} .
- IC - VBE:** Collector current (I_C in A) vs. base-emitter voltage (V_{BE} in V) for various collector temperatures (T_C in $^{\circ}\text{C}$). The curves are shown for $V_{CE} = -2\text{ V}$ and $T_C = 75^{\circ}\text{C}$, 25°C , and -25°C . The curves show that I_C increases with V_{BE} and decreases with T_C .
- hFE - IC:** DC current gain (h_{FE}) vs. collector current (I_C in A) for $V_{CE} = -2\text{ V}$ and $T_C = 75^{\circ}\text{C}$. The graph shows that h_{FE} is relatively constant around 100 for I_C between 0.1 A and 1 A.
- PC - Ta:** Power dissipation (P_C in W) vs. ambient temperature (T_a in $^{\circ}\text{C}$). The graph shows a linear relationship where P_C decreases from approximately 0.75 W at $T_a = 25^{\circ}\text{C}$ to 0 W at $T_a = 150^{\circ}\text{C}$.
- IC - VCE:** Collector current (I_C in A) vs. collector-emitter voltage (V_{CE} in V) for various collector temperatures (T_C in $^{\circ}\text{C}$). The curves are shown for $T_C = 25^{\circ}\text{C}$ and $P_C = 10\text{ W}$. The curves show that I_C increases with V_{CE} and decreases with T_C .

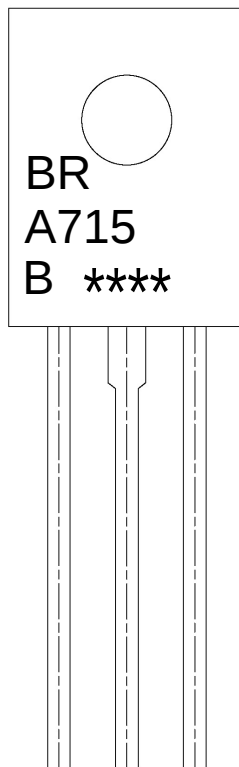
/ Package Dimensions

T□-126

单位: mm



/ Marking Instructions



Note:

BR: Company Code

A715: Product Type.

B: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-126/F	500	6	3,000	5	15,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-126/F	65	26	1,690	5	8,450	532×31×5.6	555×164×50	575×290×180ç