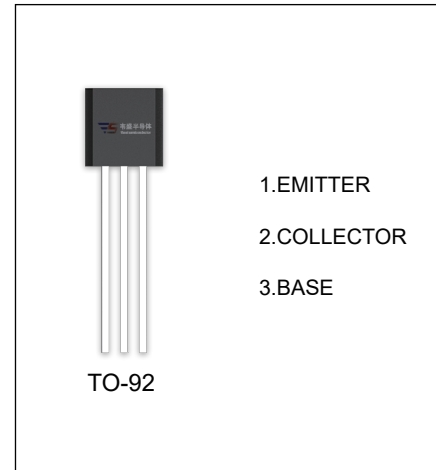


2SA719/2SA720 42AN3)34/2 (0N0)

FEATURES

- For Low-Frequency Power Amplification and Driver Amplification



ORDERING INFORMATION

| Part Number | Package | Packing Method | Pack Quantity |
|---------------------|---------|----------------|---------------|
| 2SA719/2SA720 | TO-92 | Bulk | 1000pcs/Bag |
| 2SA719-TA/2SA720-TA | TO-92 | Tape | 2000pcs/Box |

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

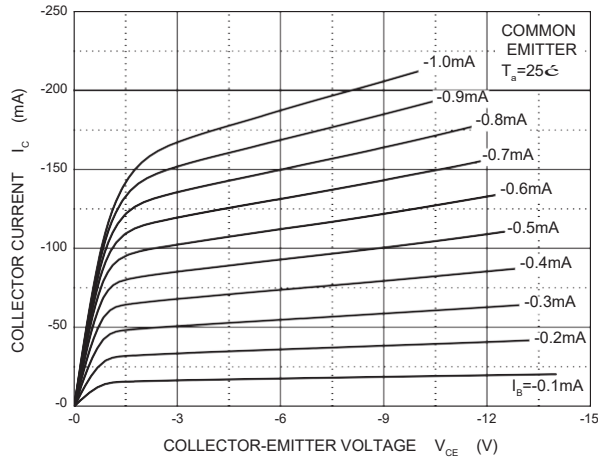
| Symbol | Parameter | Value | Unit | |
|-----------------------------------|--|---------------|----------|-------|
| V _{CBO} | Collector-Base Voltage | 2SA719 | -30 | V |
| | | 2SA720 | -60 | V |
| V _{CEO} | Collector-Emitter Voltage | 2SA719 | -25 | V |
| | | 2SA720 | -50 | V |
| V _{EBO} | Emitter-Base Voltage | | -5 | V |
| I _c | Collector Current -Continuous | | -0.5 | A |
| P _D | Collector Power Dissipation | | 625 | mW |
| R _{θ JA} | Thermal Resistance from Junction to Ambient | | 200 | °C /W |
| T _J , T _{stg} | Operation Junction and Storage Temperature Range | | -55~+150 | °C |

$T_a=25^{\circ}\text{C}$ unless otherwise specified

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---|---------------|---|------------|-----|------|---------------|
| Collector-base breakdown voltage 2SA719 2SA720 | $6_{(B2)CB/}$ | $I_C = -10\mu\text{A}, I_E = 0$ | -30 -60 | | | 6 |
| Collector-emitter breakdown voltage 2SA719 2SA720 | $6_{(B2)CE/}$ | $I_C = -10\text{mA}, I_B = 0$ | -25 -50 | | | 6 |
| Emitter-base breakdown voltage | $6_{(B2)EB/}$ | $I_E = -10\mu\text{A}, I_C = 0$ | -5 | | | 6 |
| Collector cut-off current | $I_{CB/}$ | $6_{CB} = -206, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | $I_{EB/}$ | $6_{EB} = -46, I_C = 0$ | | | -0.1 | μA |
| DC current gain | $H_{\&E(1)}$ | $6_{CE} = -106, I_C = -150\text{mA}$ | 85 | | 340 | |
| | $H_{\&E(2)}$ | $6_{CE} = -106, I_C = -500\text{mA}$ | 40 | | | |
| Collector-emitter saturation voltage | $6_{CE(SAT)}$ | $I_C = -300\text{mA}, I_B = -30\text{mA}$ | | | -0.6 | 6 |
| Base-emitter saturation voltage | $6_{BE(SAT)}$ | $I_C = -300\text{mA}, I_B = -30\text{mA}$ | | | -1.5 | 6 |
| Transition frequency | f_4 | $6_{CE} = -106, I_C = -50\text{mA}$ $F = 200\text{M}(Z)$ | 200 | | | $\text{M}(Z)$ |
| Collector Output Capacitance | COB 6 | $6_{CB} = -106, I_E = 0, F = 1\text{M}(Z)$ | | | 15 | P& |

CLASSIFICATION $h_{FE(1)}$

| Rank | 1 | 2 | 3 |
|-------|--------|---------|---------|
| Range | 85-170 | 120-240 | 170-340 |

Static Characteristic

 h_{FE} — I_c
