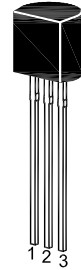


# 2SA1266-AH

## PNP Silicon Epitaxial Planar Transistor

### Features

- for switching and AF amplifier applications.
- The transistor is subdivided into three groups, O, Y and G according to its DC current gain.
- On special request, these transistors can be manufactured in different pin configurations.
- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant



1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                 | Symbol     | Value         | Unit             |
|---------------------------|------------|---------------|------------------|
| Collector Base Voltage    | $-V_{CBO}$ | 50            | V                |
| Collector Emitter Voltage | $-V_{CEO}$ | 50            | V                |
| Emitter Base Voltage      | $-V_{EBO}$ | 5             | V                |
| Collector Current         | $-I_C$     | 150           | mA               |
| Base Current              | $-I_B$     | 50            | mA               |
| Power Dissipation         | $P_{tot}$  | 500           | mW               |
| Junction Temperature      | $T_j$      | 150           | $^\circ\text{C}$ |
| Storage Temperature Range | $T_{stg}$  | - 55 to + 150 | $^\circ\text{C}$ |

### Characteristics at $T_a = 25^\circ\text{C}$

| Parameter                                                                                                                                                           | Symbol         | Min. | Max. | Unit |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|------|------|
| DC Current Gain<br>at $-V_{CE} = 6\text{ V}$ , $-I_C = 2\text{ mA}$<br><br>at $-V_{CE} = 6\text{ V}$ , $-I_C = 150\text{ mA}$<br><br>Current Gain Group O<br>Y<br>G | $h_{FE}$       | 70   | 140  | -    |
|                                                                                                                                                                     | $h_{FE}$       | 120  | 240  | -    |
|                                                                                                                                                                     | $h_{FE}$       | 200  | 400  | -    |
|                                                                                                                                                                     | $h_{FE}$       | 25   | -    | -    |
| Collector Base Cutoff Current<br>at $-V_{CB} = 50\text{ V}$                                                                                                         | $-I_{CBO}$     | -    | 100  | nA   |
| Emitter Base Cutoff Current<br>at $-V_{EB} = 5\text{ V}$                                                                                                            | $-I_{EBO}$     | -    | 100  | nA   |
| Collector Emitter Saturation Voltage<br>at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$                                                                           | $-V_{CE(sat)}$ | -    | 0.3  | V    |
| Base Emitter Saturation Voltage<br>at $-I_C = 100\text{ mA}$ , $-I_B = 10\text{ mA}$                                                                                | $-V_{BE(sat)}$ | -    | 1.1  | V    |
| Transition Frequency<br>at $-V_{CE} = 10\text{ V}$ , $-I_C = 1\text{ mA}$                                                                                           | $f_T$          | 80   | -    | MHz  |
| Collector Output Capacitance<br>at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$                                                                                     | $C_{ob}$       | -    | 7    | pF   |

