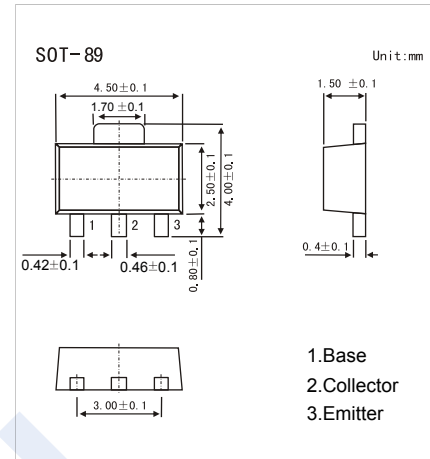


NPN Transistors

2SD1368-HF

■ Features

- Low frequency power amplifier
- Complementary to 2SB1002-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|------------------------------------|------------------|------------|------|
| Collector - Base Voltage | V _{CB0} | 100 | V |
| Collector - Emitter Voltage | V _{CE0} | 50 | |
| Emitter - Base Voltage | V _{EB0} | 6 | |
| Collector Current - Continuous | I _C | 1 | A |
| Collector Current - Pulse (Note.1) | I _{CP} | 1.5 | |
| Collector Power Dissipation | P _C | 1 | W |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature Range | T _{stg} | -55 to 150 | |

Note.1:PW ≤ 10 ms, Duty cycle ≤ 20%.

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|---|-----|-----|-----|------|
| Collector-base breakdown voltage | V _{CB0} | I _C = 100 uA, I _E = 0 | 100 | | | V |
| Collector-emitter breakdown voltage | V _{CE0} | I _C = 1 mA, R _{BE} = ∞ | 50 | | | |
| Emitter - base breakdown voltage | V _{EB0} | I _E = 100 uA, I _C = 0 | 6 | | | |
| Collector-base cut-off current | I _{CB0} | V _{CB} = 80 V, I _E = 0 | | | 0.1 | uA |
| Emitter cut-off current | I _{EB0} | V _{EB} = 5V, I _C =0 | | | 0.1 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =1 A, I _B =100mA | | | 0.3 | V |
| Base - emitter saturation voltage | V _{BE(sat)} | I _C =1 A, I _B =100mA | | | 1.2 | |
| DC current gain | h _{FE} | V _{CE} = 2V, I _C = 0.1 A | 100 | | 500 | |
| Collector output capacitance | C _{ob} | V _{CB} = 10V, I _E = 0, f=1MHz | | 20 | | pF |
| Transition frequency | f _t | V _{CE} = 2V, I _C = 10mA | | 100 | | MHz |

■ Classification of h_{FE}

| Type | 2SD1368-A-HF | 2SD1368-B-HF | 2SD1368-C-HF |
|---------|-----------------|-----------------|-----------------|
| Range | 100-200 | 160-320 | 250-500 |
| Marking | CA _F | CB _F | CC _F |

NPN Transistors

2SD1368-HF

■ Typical Characteristics

