

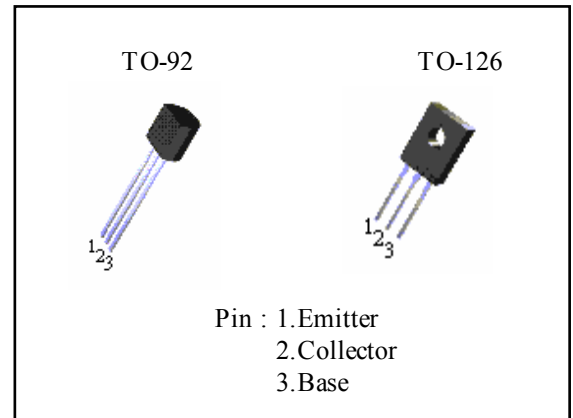
NPN Epitaxial Silicon Transistor

AUDIO FREQUENCY POWER AMPLIFIER LOW SPEED SWITCHING

- Complement to PJB772
- PW 10ms, Duty Cycle 50% Pulse Test
- PW 350μs, Duty Cycle 2%

ABSOLUTE MAXIMUM RATINGS (T_a = 25 °C)

| Characteristic | Symbol | Rating | Unit |
|--|------------------|---------|------|
| Collector-Base Voltage | V _{CB0} | 40 | V |
| Collector-Emitter Voltage | V _{CEO} | 30 | V |
| Emitter-Bias Voltage | V _{EBO} | 5 | V |
| Collector Current (DC) | I _C | 3 | A |
| *Collector Current (Pulse) | I _C | 7 | A |
| Base Current (DC) | I _B | 0.6 | A |
| Collector Dissipation (T _a =25°C) | P _C | 10 | W |
| Collector Dissipation (T _a =25°C) | P _C | 1 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{stg} | -55~150 | °C |



ORDERING INFORMATION

| Device | Operating Temperature | Package |
|----------|-----------------------|---------|
| PJD882CT | -20°C ~ +85°C | TO-92 |
| PJD882CK | | TO-126 |

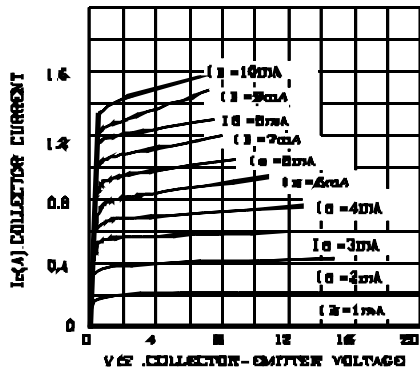
ELECTRICAL CHARACTERISTICS (T_a=25°C)

| Characteristics | Symbol | Test condition | Min | Typ | Min | Unit |
|---------------------------------------|----------------------|---|-----|-----|-----|------|
| Collector Cutoff Current | I _{CB0} | V _{CB} =30V, I _E =0 | | | 1 | μA |
| Emitter Cutoff Current | I _{EBO} | V _{EB} =3V, I _C =0 | | | 1 | μA |
| *DC Current Gain | h _{FE1} | V _{CE} =2V, I _C =20mA | 30 | 150 | | |
| | h _{FE2} | V _{CE} =2V, I _C =1A | 60 | 160 | 400 | |
| *Collector Emitter Saturation Voltage | V _{CE(SAT)} | I _C =2A, I _B =0.2A | | 0.3 | 0.5 | V |
| *Base Emitter Saturation Voltage | V _{BE(SAT)} | I _C =2A, I _B =0.2A | | 1.0 | 2.0 | V |
| Current Gain Bandwidth Product | f _T | V _{CE} =5V, I _C =0.1A | | 90 | | MHz |
| Output Capacitance | C _{ob} | V _{CB} =10V, I _E =0 f=1MHz | | 45 | | pF |

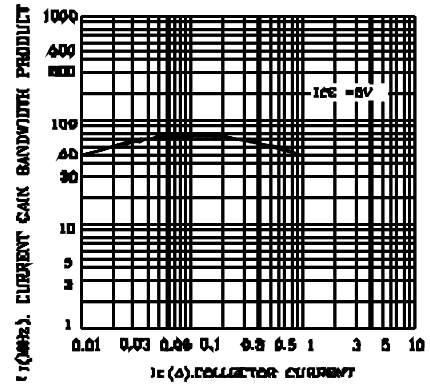
h_{FE}(2) CLASSIFICATION

| Classification | R | O | Y | G |
|---------------------|--------|---------|---------|---------|
| h _{FE} (2) | 60-120 | 100-200 | 160-320 | 200-400 |

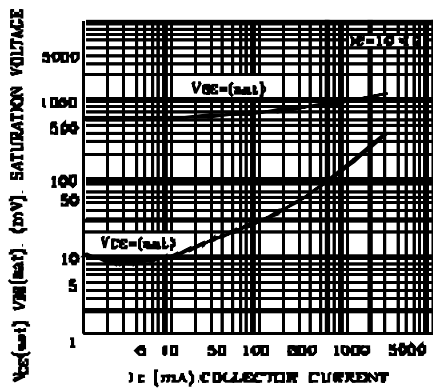
STATIC CHARACTERISTIC



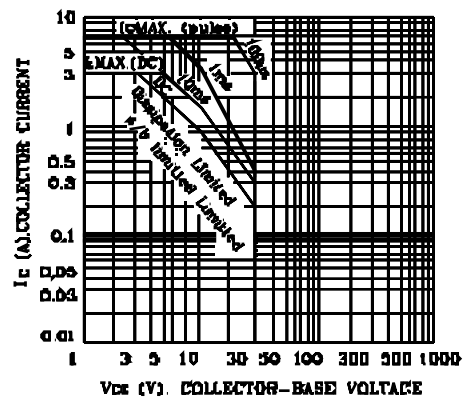
CURRENT GAIN-BANDWIDTH PRODUCT



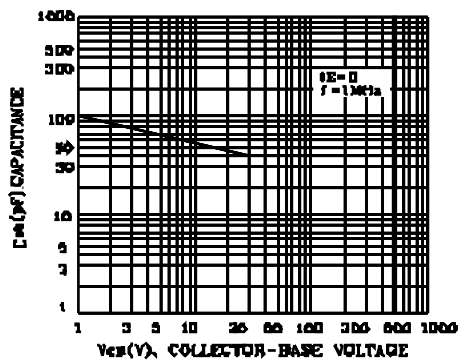
BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



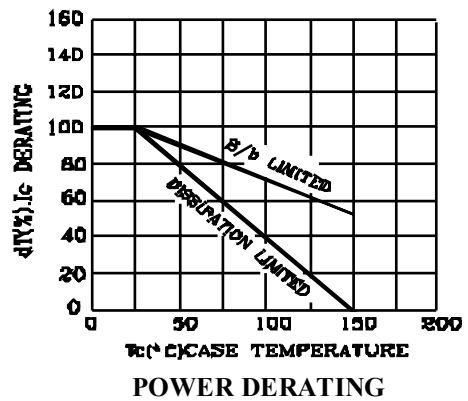
SAFE OPERATING AREAS



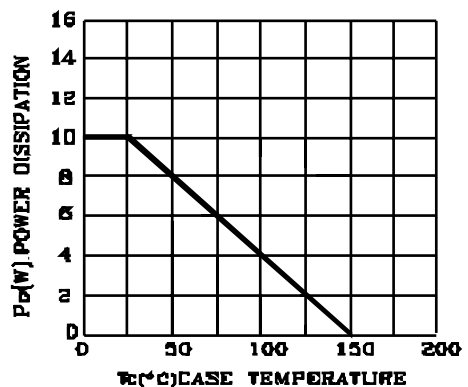
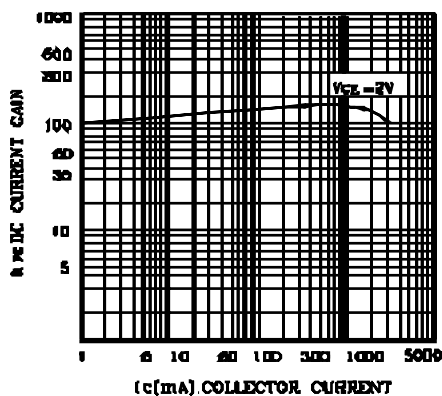
COLLECTOR OUTPUT CAPACITANCE



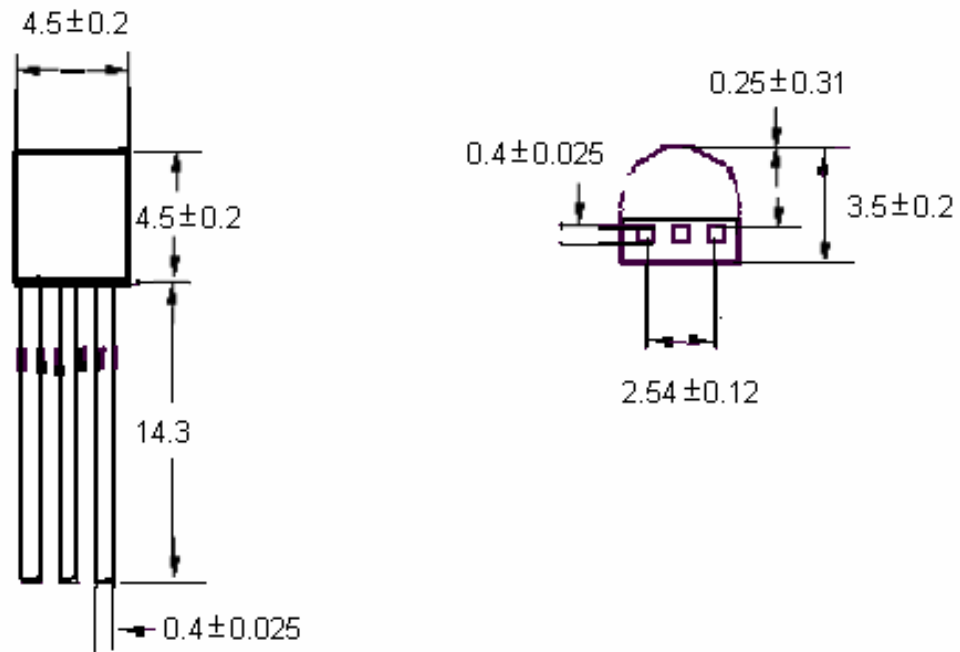
DERATING CURVE OF SAFE OPERATING AREAS



DC CURRENT GAIN



TO-92 Unit:mm



TO-126 Unit:mm

