

2SD1265, 2SD1265A

Silicon NPN Triple-Diffused Junction Type

Power Amplifier

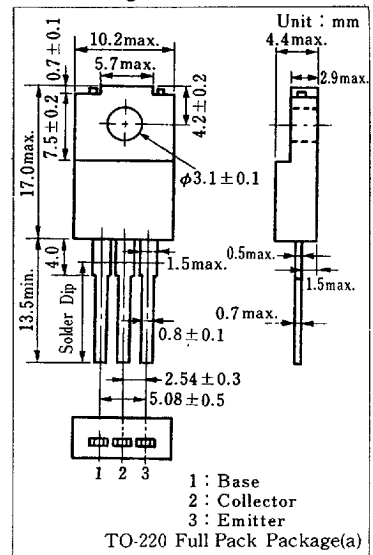
■ Features

- Wide area of safety operation (ASO)
- "Full Pack" package for simplified mounting on a heat sink with one screw

■ Absolute Maximum Ratings (Tc=25°C)

| Item | Symbol | Value | Unit | |
|-----------------------------|------------------|-----------------------|------|---|
| Collector-base voltage | 2SD1265 | 60 | V | |
| | 2SD1265A | 80 | | |
| Collector-emitter voltage | 2SD1265 | 60 | V | |
| | 2SD1265A | 80 | | |
| Emitter-base voltage | V _{EB0} | 8 | V | |
| Peak collector current | I _{CP} | 6 | A | |
| Collector current | I _C | 4 | A | |
| Base-emitter voltage | I _B | 1 | A | |
| Collector power dissipation | P _C | T _c =25 °C | 30 | W |
| | | T _a =25 °C | 2 | |
| Junction temperature | T _j | 150 | °C | |
| Storage temperature | T _{stg} | -55 ~ +150 | °C | |

■ Package Dimensions



■ Electrical Characteristics (Tc=25°C)

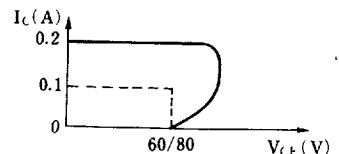
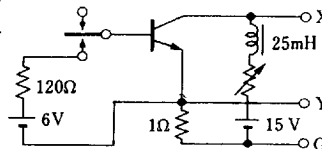
| Item | Symbol | Condition | min. | typ. | max. | Unit |
|--------------------------------------|--------------------------|--|------|------|------|------|
| Collector cutoff current | I _{CB0} | V _{CB} =20 V, I _E =0 | | | 30 | μA |
| Emitter cutoff current | I _{EBO} | V _{EB} =8 V, I _C =0 | | | 1 | mA |
| Collector-emitter voltage | V _{CE0(sus)} *2 | I _C =0.2 A, L=25 mH | 60 | | | V |
| | | | 80 | | | |
| DC current gain | h _{FE1} | V _{CE} =3 V, I _C =0.1 A | 40 | | | |
| | h _{FE2} *1 | V _{CE} =3 V, I _C =1 A | 30 | | 160 | |
| Base-emitter voltage | V _{BE} | V _{CE} =3 V, I _C =1 A | | | 1.2 | V |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C =2 A, I _B =0.4 A | | | 1 | V |
| Transition frequency | f _T | V _{CE} =10V, I _C =0.2A, f=0.5MHz | | 1 | | MHz |

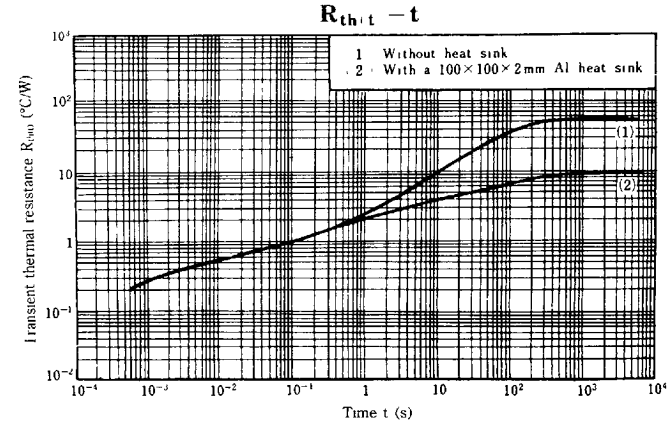
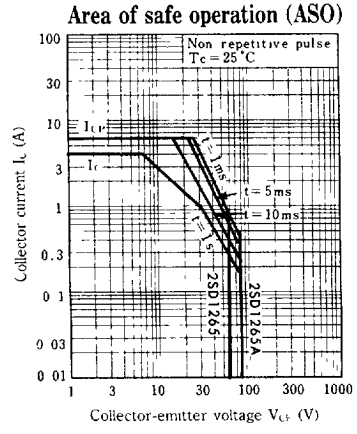
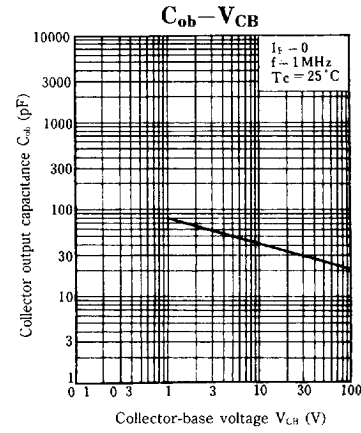
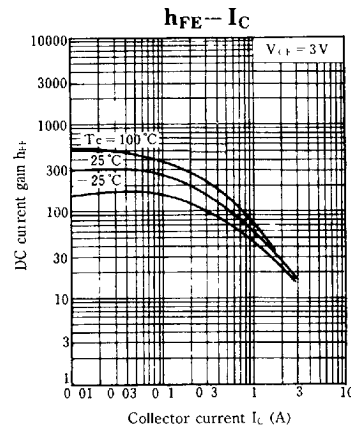
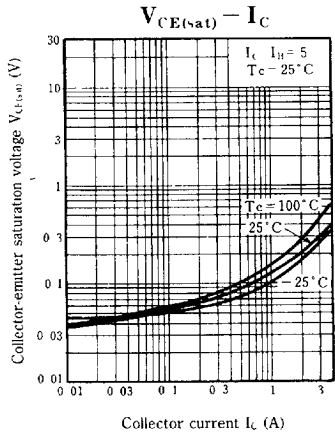
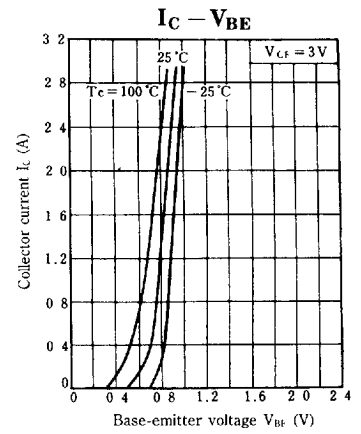
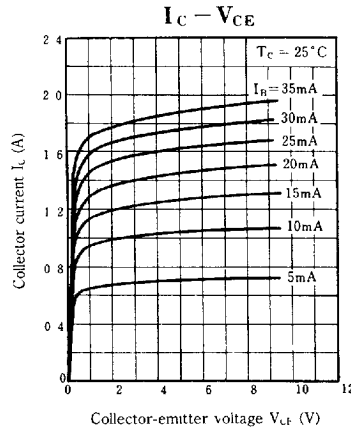
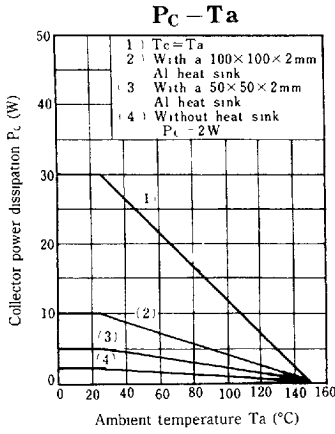
*1 h_{FE2} Classifications

| Class | Q | P | O |
|------------------|---------|----------|----------|
| h _{FE2} | 30 ~ 60 | 50 ~ 100 | 80 ~ 160 |

*2 V_{CE0(sus)} Test method

Mercury relay 50/60 Hz





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