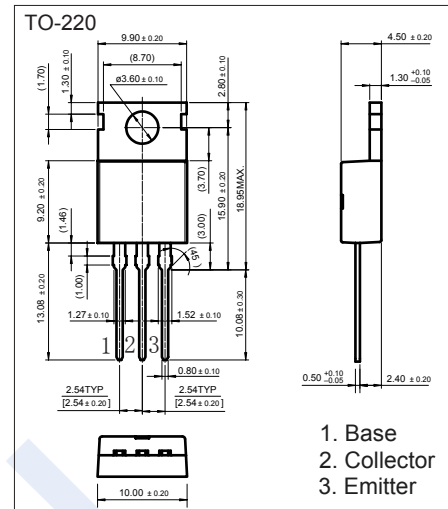


NPN Transistors

KTC2238A

■ Features

- High Transition Frequency
- Complementary to KTA968A



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|---|------------------|------------|------|
| Collector - Base Voltage | V _{CBO} | 180 | V |
| Collector - Emitter Voltage | V _{CEO} | 180 | |
| Emitter - Base Voltage | V _{EB0} | 5 | |
| Collector Current - Continuous | I _C | 1.5 | A |
| Collector Power Dissipation T _c = 25°C | P _C | 25 | W |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature Range | T _{stg} | -55 to 150 | |

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------|---|-----|-----|-----|------|
| Collector- base breakdown voltage | V _{CBO} | I _C = 1 mA, I _E = 0 | 180 | | | V |
| Collector- emitter breakdown voltage | V _{CEO} | I _C = 10 mA, I _B = 0 | 180 | | | |
| Emitter - base breakdown voltage | V _{EB0} | I _E = 1 mA, I _C = 0 | 5 | | | |
| Collector-base cut-off current | I _{CBO} | V _{CB} = 180 V, I _E = 0 | | | 1 | uA |
| Emitter cut-off current | I _{EB0} | V _{EB} = 5 V, I _C = 0 | | | 1 | |
| Collector-emitter saturation voltage | V _{CE(sat)} | I _C = 500 mA, I _B = 500 mA | | | 1.5 | V |
| Base - emitter saturation voltage | V _{BE(sat)} | I _C = 500 mA, I _B = 500 mA | | | 1.2 | |
| Base - emitter voltage | V _{BE} | V _{CE} = 5 V, I _C = 500 mA | | | 1 | |
| DC current gain | h _{FE} | V _{CE} = 5 V, I _C = 100 mA | 70 | | 240 | |
| Collector output capacitance | C _{ob} | V _{CB} = 10 V, I _E = 0, f = 1 MHz | | 25 | | pF |
| Transition frequency | f _T | V _{CE} = 10 V, I _C = 100 mA | | 100 | | MHz |

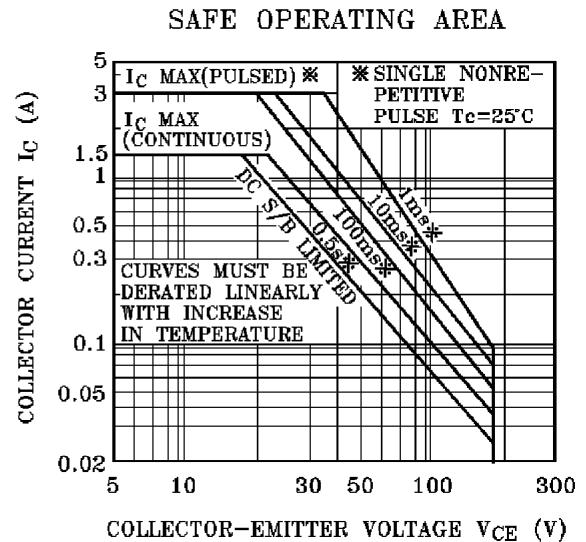
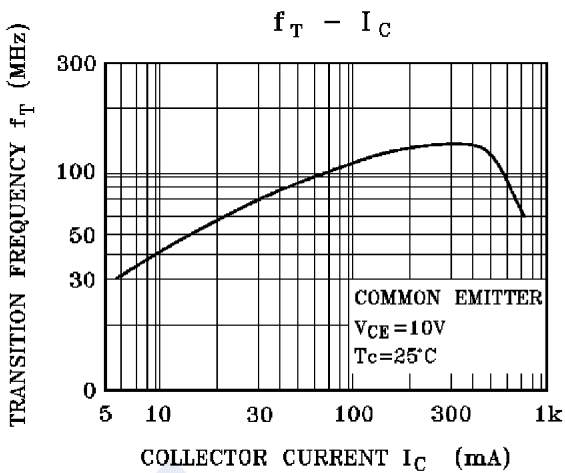
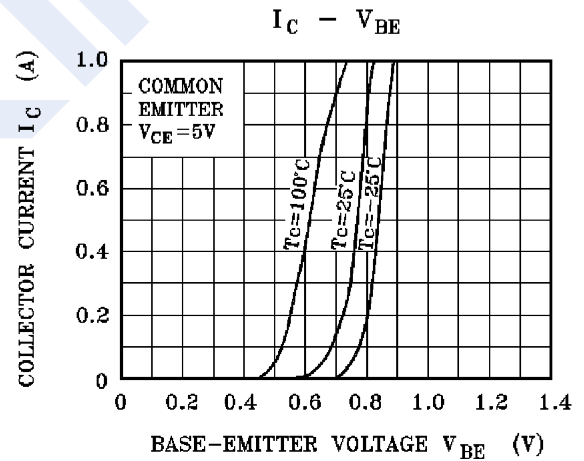
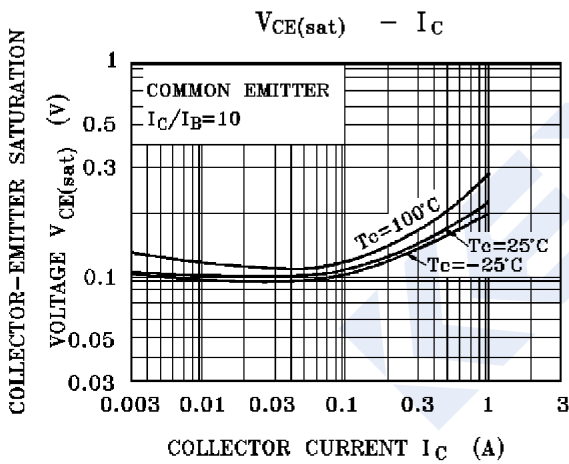
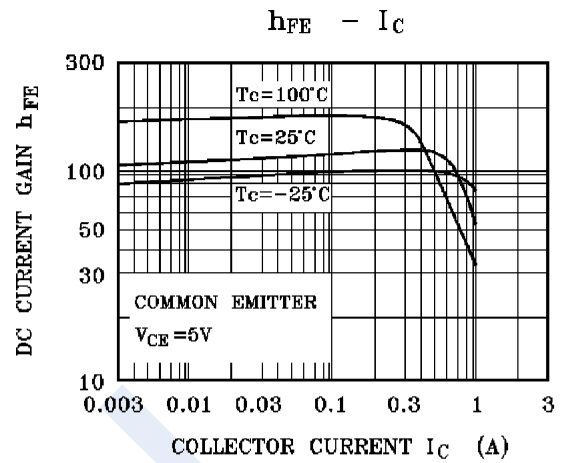
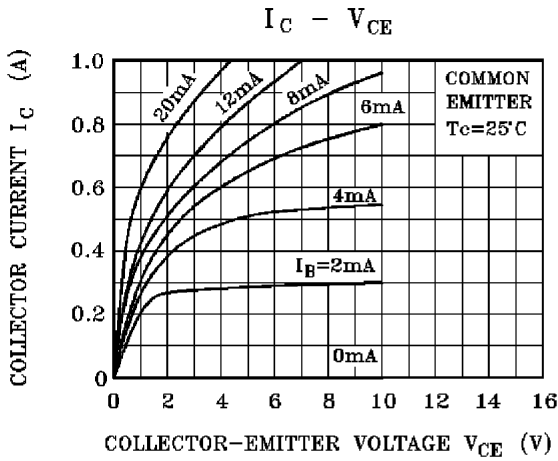
■ Classification of h_{FE}

| Type | KTC2238A-O | KTC2238A-Y |
|-------|------------|------------|
| Range | 70-240 | 120-240 |

NPN Transistors

KTC2238A

■ Typical Characteristics



NPN Transistors

KTC2238A

■ Typical Characteristics

