

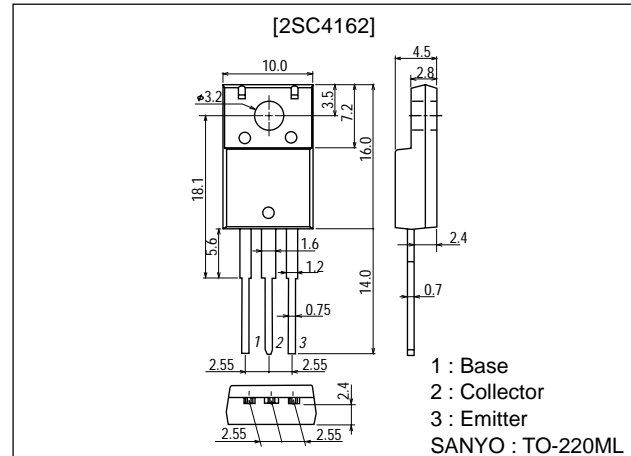
**2SC4162****400V/10A Switching Regulator Applications****Features**

- High breakdown voltage, high reliability.
- High-speed switching ($t_f=0.1\mu s$ typ).
- Wide ASO.
- Adoption of MBIT process.
- Micaless package facilitating mounting.

Package Dimensions

unit:mm

2041A

**Specifications****Absolute Maximum Ratings** at $T_a = 25^\circ C$

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|---|-------------|------------|
| Collector-to-Base Voltage | V_{CB0} | | 500 | V |
| Collector-to-Emitter Voltage | V_{CE0} | | 400 | V |
| Emitter-to-Base Voltage | V_{EBO} | | 7 | V |
| Collector Current | I_C | | 10 | A |
| Collector Current (Pulse) | I_{CP} | $PW \leq 300\mu s$, duty cycle $\leq 10\%$ | 20 | A |
| Collector Dissipation | P_C | $T_c = 25^\circ C$ | 35 | W |
| Junction Temperature | T_J | | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ C$ |

Electrical Characteristics at $T_a = 25^\circ C$

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|--------------------------|-----------|--------------------------|---------|-----|-----|---------|
| | | | min | typ | max | |
| Collector Cutoff Current | I_{CB0} | $V_{CB}=400V$, $I_E=0$ | | | 10 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB}=5V$, $I_C=0$ | | | 10 | μA |
| DC Current Gain | h_{FE1} | $V_{CE}=5V$, $I_C=1.6A$ | 15* | | 50* | |
| | h_{FE2} | $V_{CE}=5V$, $I_C=8A$ | 10 | | | |
| | h_{FE3} | $V_{CE}=5V$, $I_C=10mA$ | 10 | | | |

Continued on next page.

* : The h_{FE1} of the 2SC4162 is classified as follows. When specifying the h_{FE1} rank, specify two ranks or more in principle.

| Rank | L | M | N |
|----------|----------|----------|----------|
| h_{FE} | 15 to 30 | 20 to 40 | 30 to 50 |

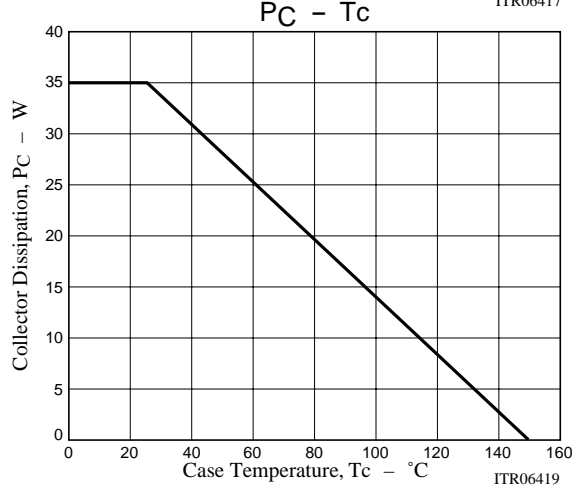
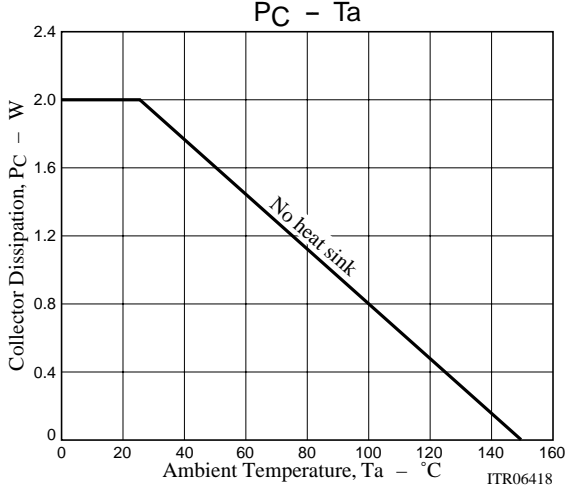
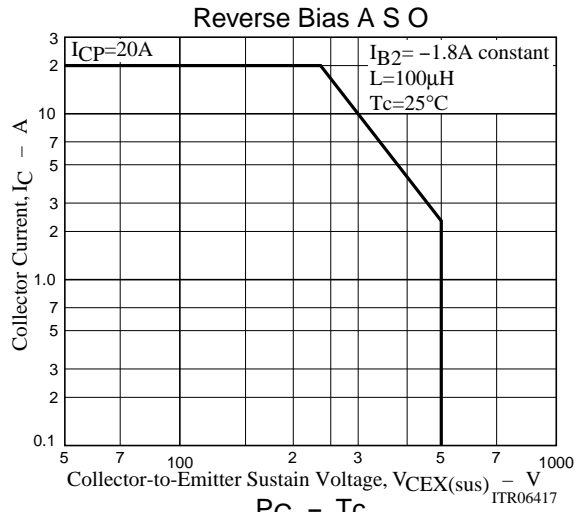
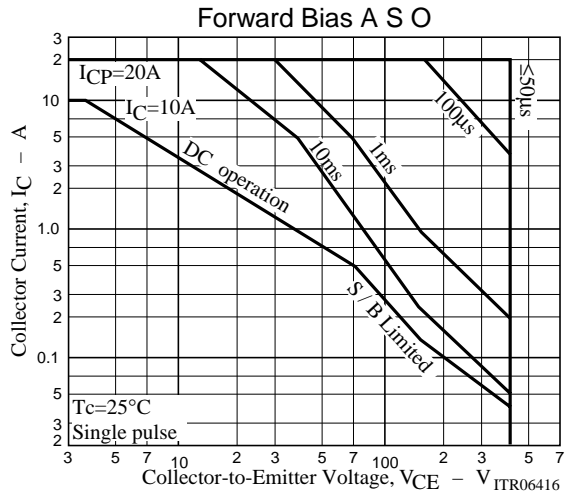
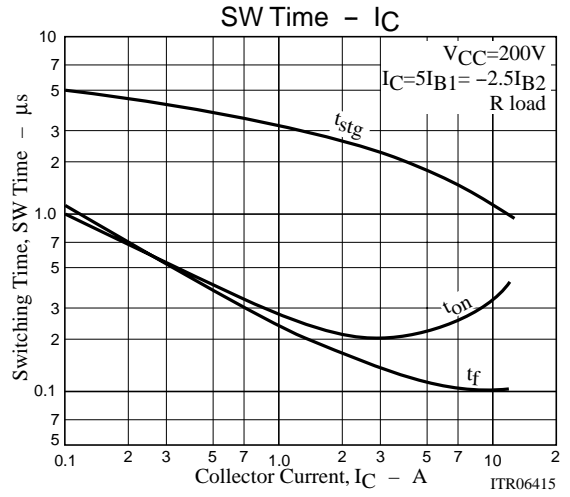
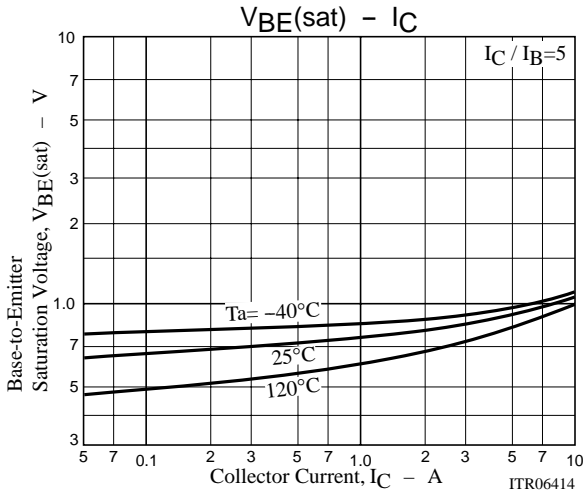
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2SC4162



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