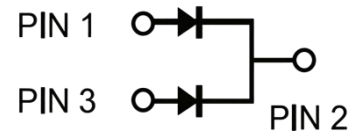


Schottky Barrier Rectifiers

| Parameter | Value | Unit |
|-------------|----------|------|
| V_{RRM} | 60 | V |
| $I_{F(AV)}$ | 20(2*10) | A |

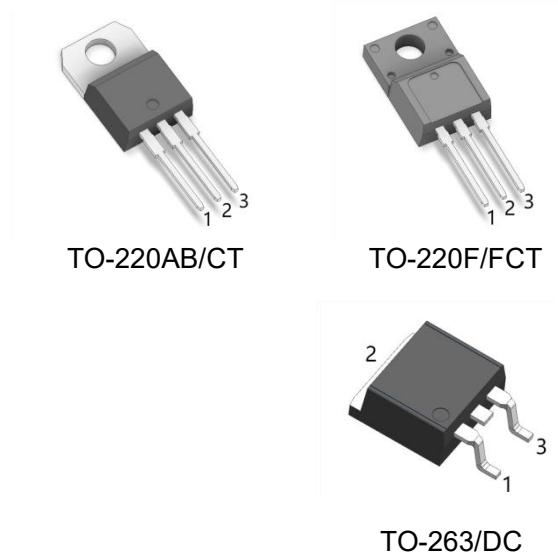


Features

- Common cathode structure
- Low power consumption, high efficiency
- Good high-temperature characteristics
- Over voltage protection loop, high reliability

Applications

- Power Factor Correction(PFC)
- Switched Mode Power Supply(SMPS)
- Uninterruptible Power Supply(UPS)
- Air Conditioner



Absolute Maximum Ratings($T_c=25^{\circ}\text{C}$, unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|--|-----------------|------------------|----------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 60 | V |
| Working Peak Reverse Voltage | V_{RWM} | 60 | V |
| Maximum DC Blocking Voltage | V_{DC} | 60 | V |
| Maximum Average Forward Rectified Current | Per Leg | 10 | A |
| | Total | 20 | |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 200 | A |
| Maximum Junction Temperature | T_J | 175 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{STG} | -40 to +150 | $^{\circ}\text{C}$ |
| Typical Thermal Resistance | $R_{\theta JC}$ | TO-220AB, TO-263 | $^{\circ}\text{C/W}$ |
| | | TO-220F | |

Note1: Thermal resistance from Junction to case per leg mounted on heat sink.

Electrical Characteristics unless otherwise specified

| Parameter | | Symbol | Value | | Unit |
|----------------------|-------------------|--------|-------|------|---------|
| Forward Voltage Drop | | | Typ. | Max. | V |
| $I_F=100\mu A$ | $T_J=25^\circ C$ | V_R | 73 | 85 | |
| $I_F=10A$ | $T_J=25^\circ C$ | V_F | 0.74 | 0.76 | |
| | $T_J=125^\circ C$ | | 0.6 | 0.65 | |
| $V_R=V_{RRM}$ | $T_J=25^\circ C$ | I_R | 4 | 10 | μA |
| | $T_J=125^\circ C$ | | - | 5 | mA |

Note2:Pulse test: 300 μs pulse width, 1% duty cycle

Typical Characteristics

Fig 1. I_F VS V_F

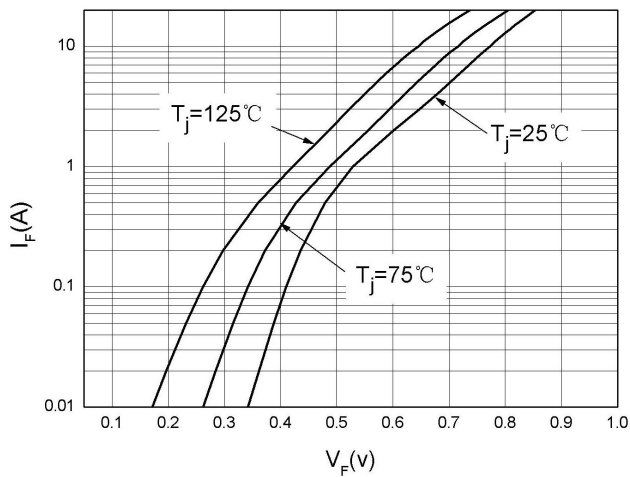


Fig 2. I_R VS V_R

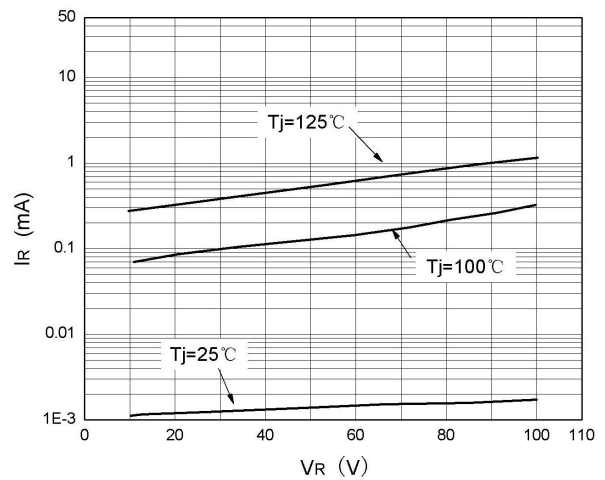


Fig 3. $I_F(AV)$ vs T_C

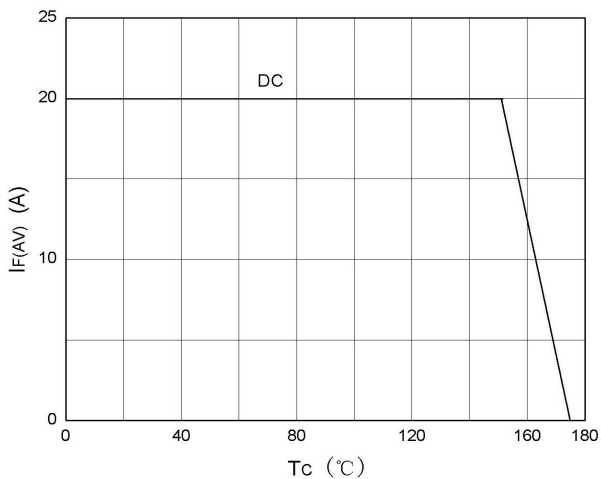
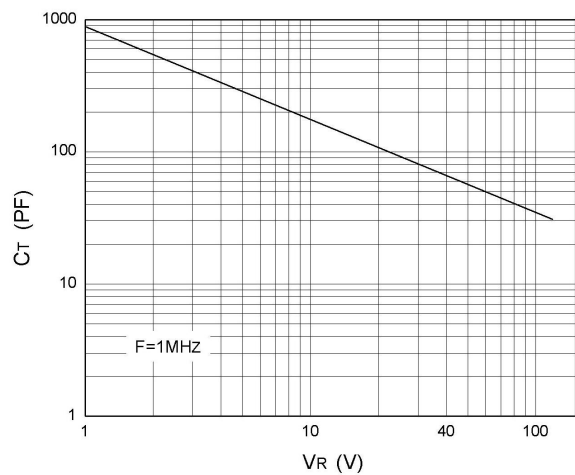
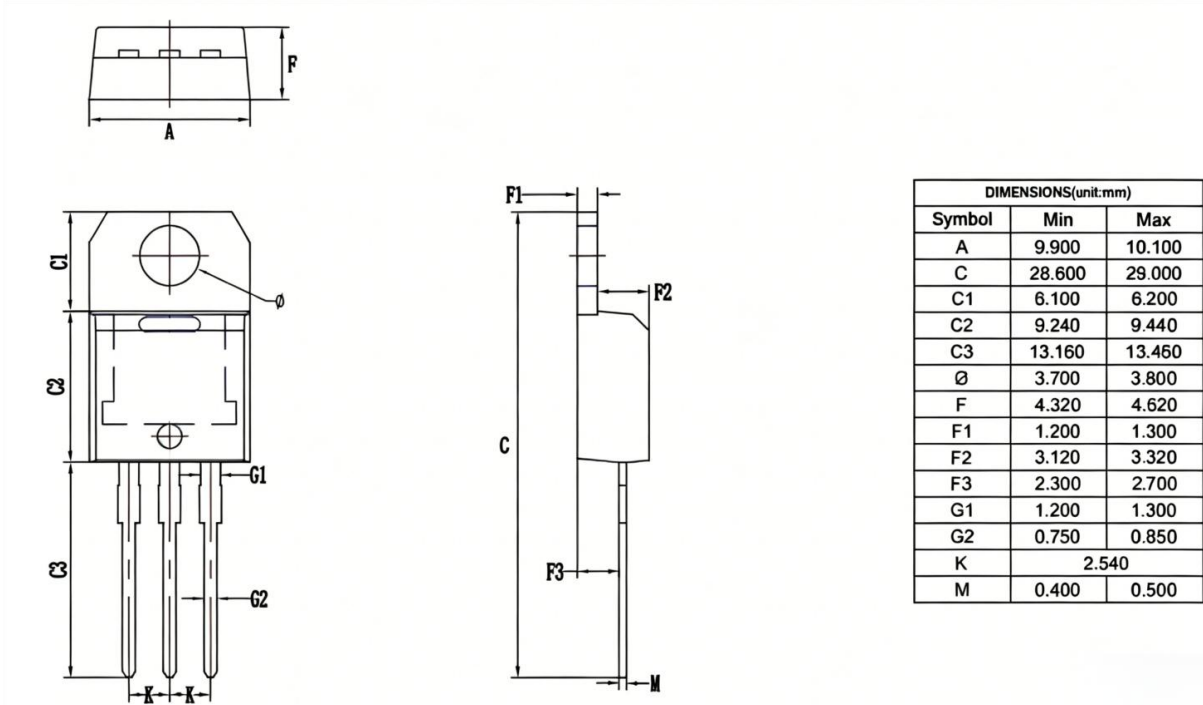


Fig 4. C_T vs V_R

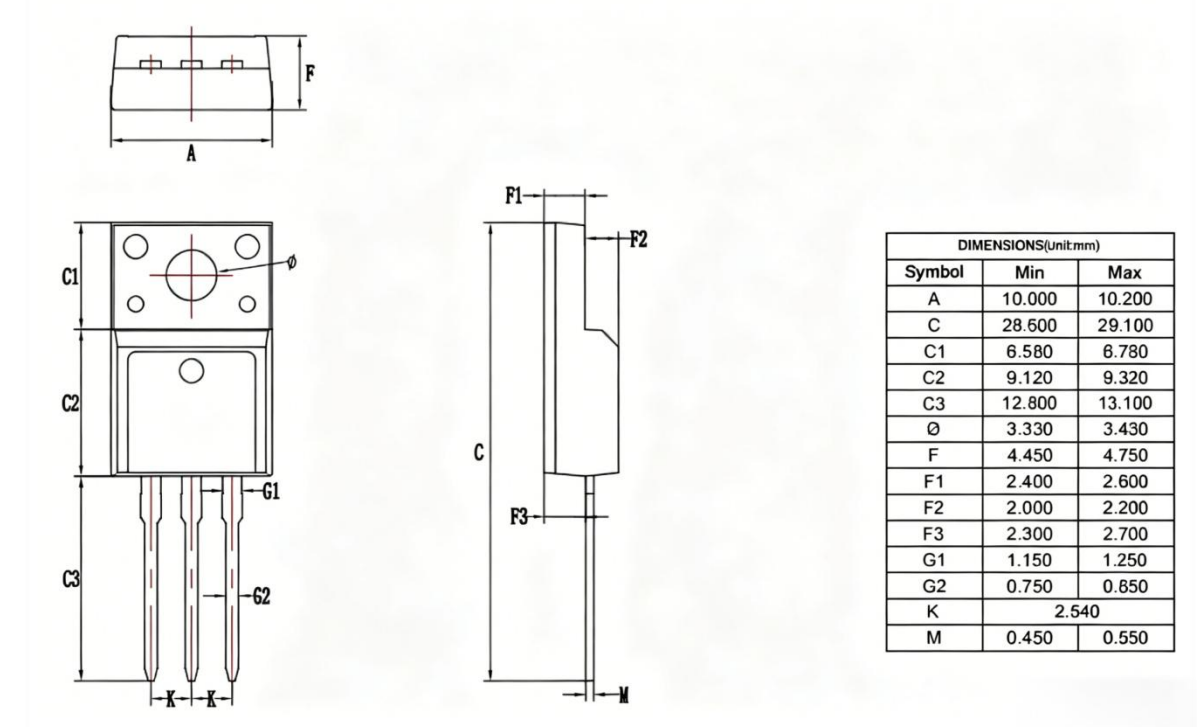


Package Outlines

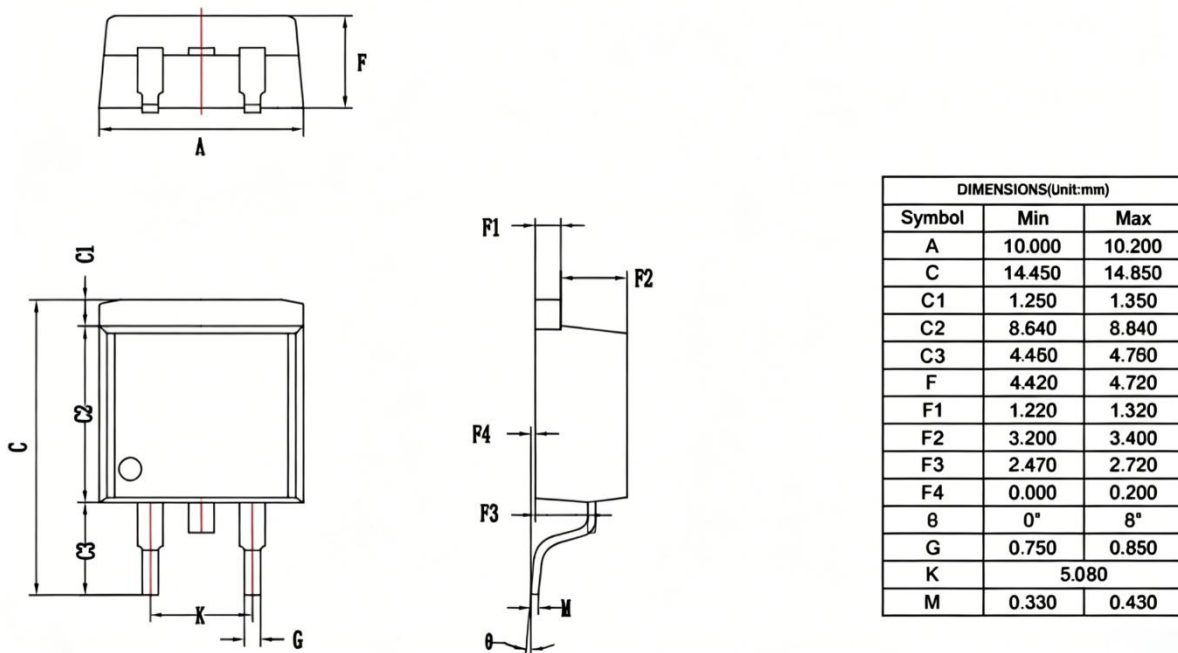
TO-220AB



TO-220F



TO-263



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