DACO®

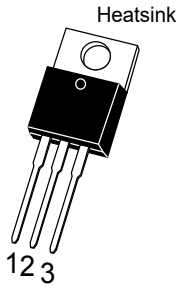
# SR40300CT

## 40A Power pack Schottky Barrier Rectifier

■ **Productor Character**

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHS Product.
- Compliance with EU REACH.

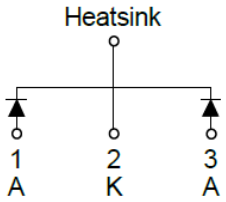
Package:TO-220AB




■ **Primary Use**

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

■ **Equivalent Circuit**




■ **Summarize**

- SR40300CT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

### Absolute Maximum Ratings(Ta=25°C unless otherwise noted)

| Item | | Symbol | Data | Unit |
|---|---|---|---|---|
| Maximal Inverted Repetitive Peak Voltage | | $V_{RRM}$ | 300 | V |
| Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle | Per Device | $I_{FAV}$ | 40 | A |
| | Per Diode | | 20 | |
| Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method) | Per Diode | $I_{FSM}$ | 250 | A |
| Operating Junction Temperature | | $T_J$ | -40～175 | °C |
| Storage Temperature | | $T_{STG}$ | -40～175 | °C |
| Typical Thermal Resistance(per leg) | Package=TO-220AB | $R_{\theta JC}$ | 2 | °C/W |

### Electricity Character Per Diode(Ta=25°C unless otherwise noted)

| Item | Test Condition | Value(min) | Value(typ) | Value(max) | Unit |
|---|---|---|---|---|---|
| $V_B$ | Tj=25°C,IR=1mA | 300 | — | — | V |
| $I_R$ | Tj=25°C,VR=300V | — | — | 10 | μA |
| | Tj=125°C,VR=300V | — | — | 3 | mA |
| $V_F$ | Tj=25°C,IF=20A | — | 0.92 | 0.98 | V |
| | Tj=125°C,IF=20A | — | — | 0.9 | V |
| $C_J$ | Tj=25°C,VR=4V,f=1MHz | — | 155 | — | pF |

## Typical Characteristics Curves

**Fig1. Typical Forward Current and Forward Voltage**

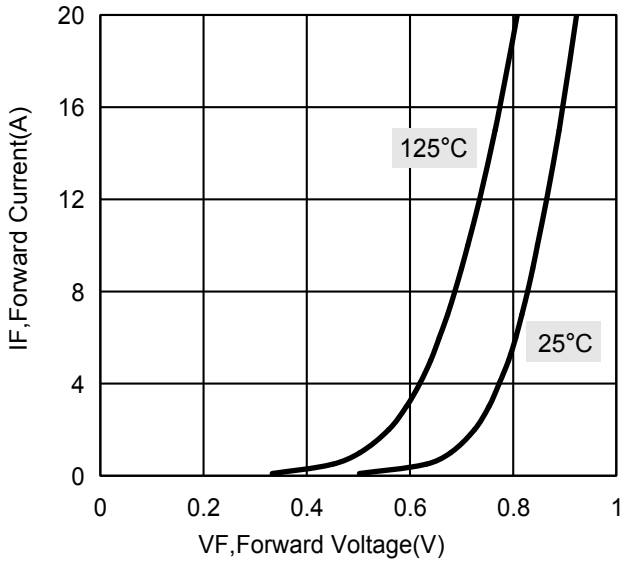



**Fig2. Typical Current Derating Curve,Perelement**

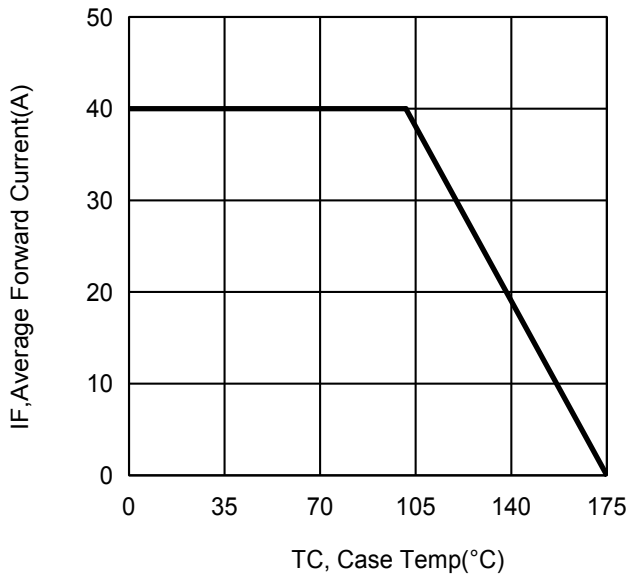



**Fig3. Typical Reverse Current and Reverse Voltage**

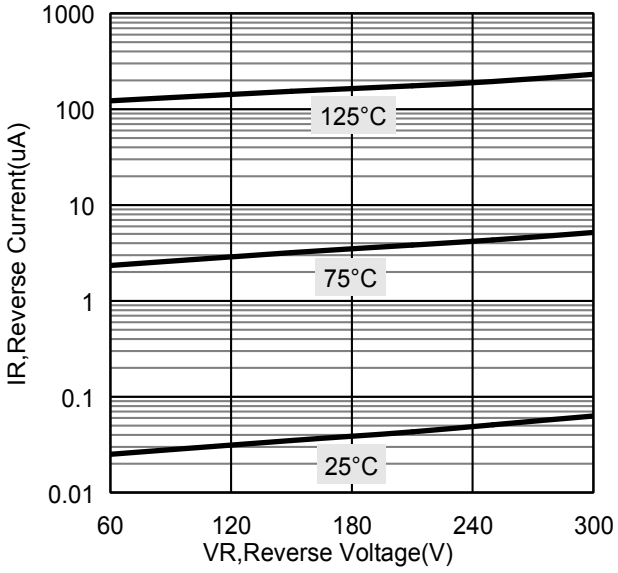
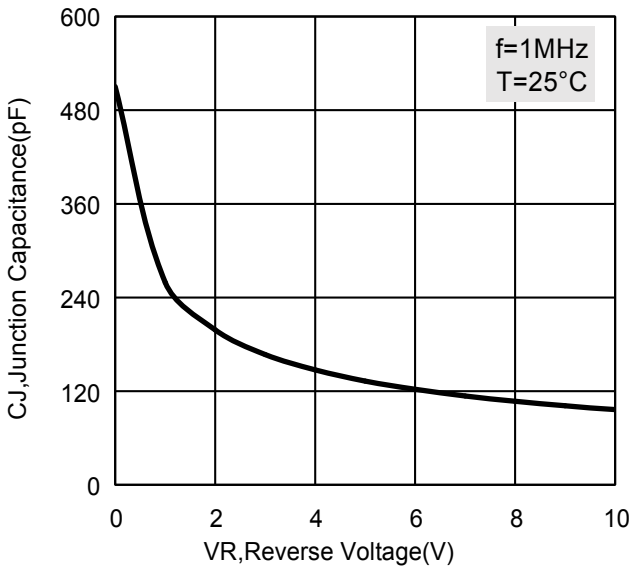
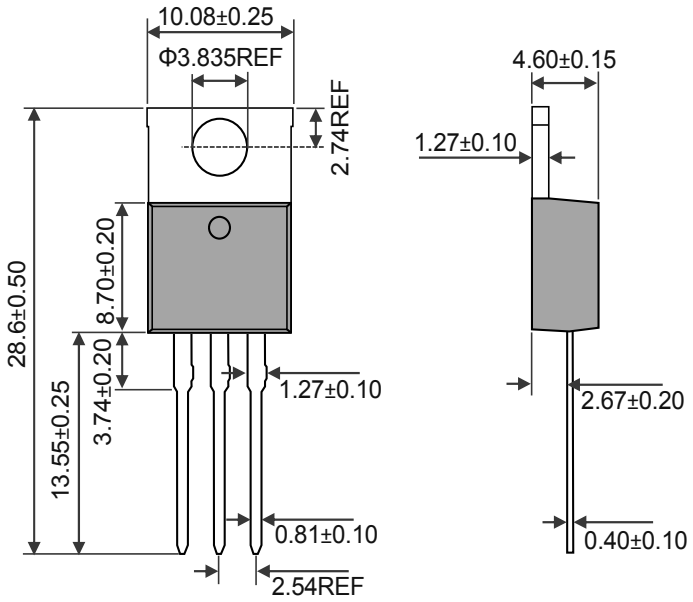



**Fig4. Typical Junction Capacitance and Reverse Voltage**



## Package Outline Dimensions

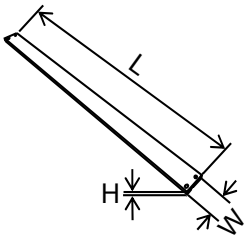



TO-220AB
Unit:mm

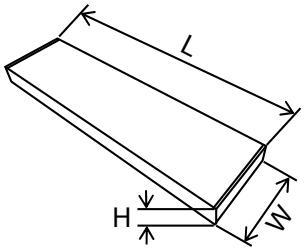
## Packing Information

| Packaging | Part Number | Quantity(pcs) | Size(mm) |
|---|---|---|---|
| Tube | Tube | 50 | L534×W33×H7 |
| | Inner Box | 1000 | L560×W150×H40 |
| | Outer Box | 5000 | L580×W235×H175 |

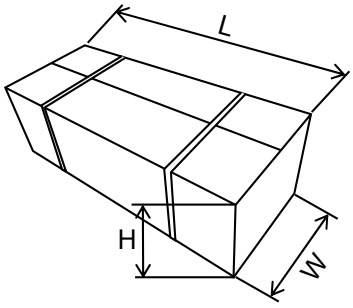
**Packaging:Tube**




Tube




Tube Inner Box




Tube Outer Box

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