



SSCS1040TC THUR SSCS10100TC

10.0Amp Schottky Barrier Rectifiers

● Features

- ✧ The plastic package carries Underwriters Laboratory
- ✧ Flammability Classification 94V-0
- ✧ Construction utilizes void-free molded plastic technique
- ✧ Low reverse leakage
- ✧ High forward surge current capability
- ✧ High temperature soldering guaranteed 260°C/10 seconds at terminals

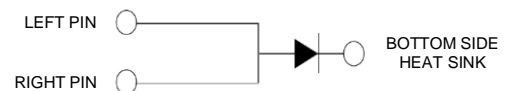
● PIN configuration



TO-277B

● Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: Polarity symbol marking on body
- ✧ Mounting Position: Any



Circuit Diagram

● Absolute maximum rating @T_A=25°C

| Parameter | Symbol | SSCS10 | | | | | | Unit |
|---|--------------------|------------|------|------|------|------|-------|------|
| | | 40TC | 45TC | 50TC | 60TC | 80TC | 100TC | |
| Maximum Peak Repetitive Peak Reverse Voltage | V _{RRM} | 40 | 45 | 50 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | V _{RMS} | 28 | 31.5 | 35 | 42 | 56 | 70 | V |
| Maximum DC Blocking Voltage | V _{DC} | 40 | 45 | 50 | 60 | 80 | 100 | V |
| Maximum Average Forward Rectified Current | I _{F(AV)} | 10.0 | | | | | | A |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 175.0 | | | | | | A |
| Max Instantaneous Forward Voltage at 2 A | V _F | 0.35 | | | 0.40 | 0.45 | | V |
| Max Instantaneous Forward Voltage at 10 A | | 0.48 | | | 0.55 | 0.70 | | |
| Maximum DC Reverse Current T _a = 25 °C | I _R | 0.5 | | | | 0.2 | | mA |
| at Rated DC Blocking Voltage T _a =125 °C | | 50 | | | | 20 | | |
| Typical Thermal Resistance | R _{QJA} | 60.0 | | | | | | °C/W |
| Operating Temperature | T _J | -55 ~ +150 | | | | | | °C |
| Storage Temperature | T _{STG} | -55 ~ +150 | | | | | | °C |



● Typical Performance Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

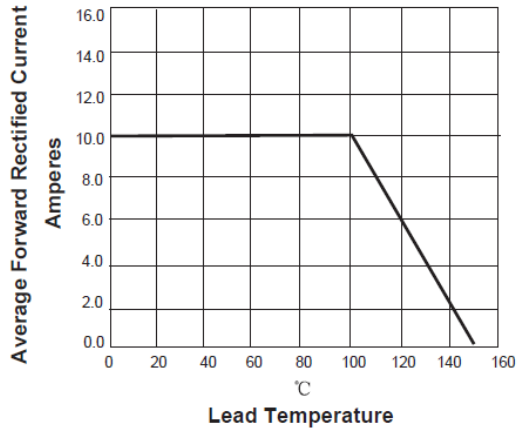


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

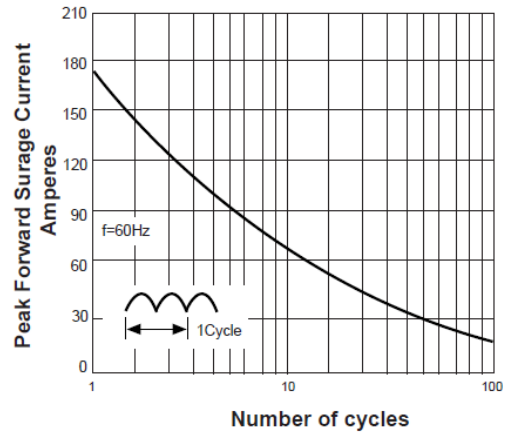


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

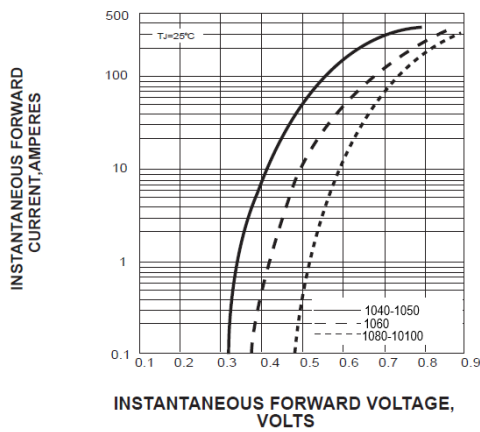
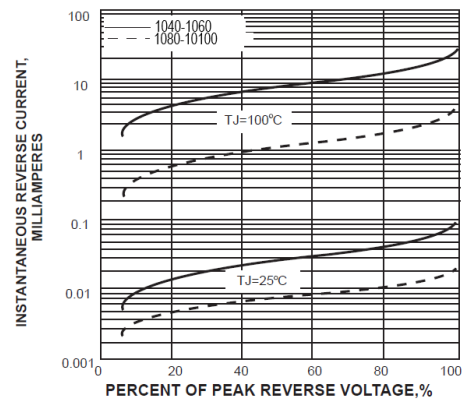


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



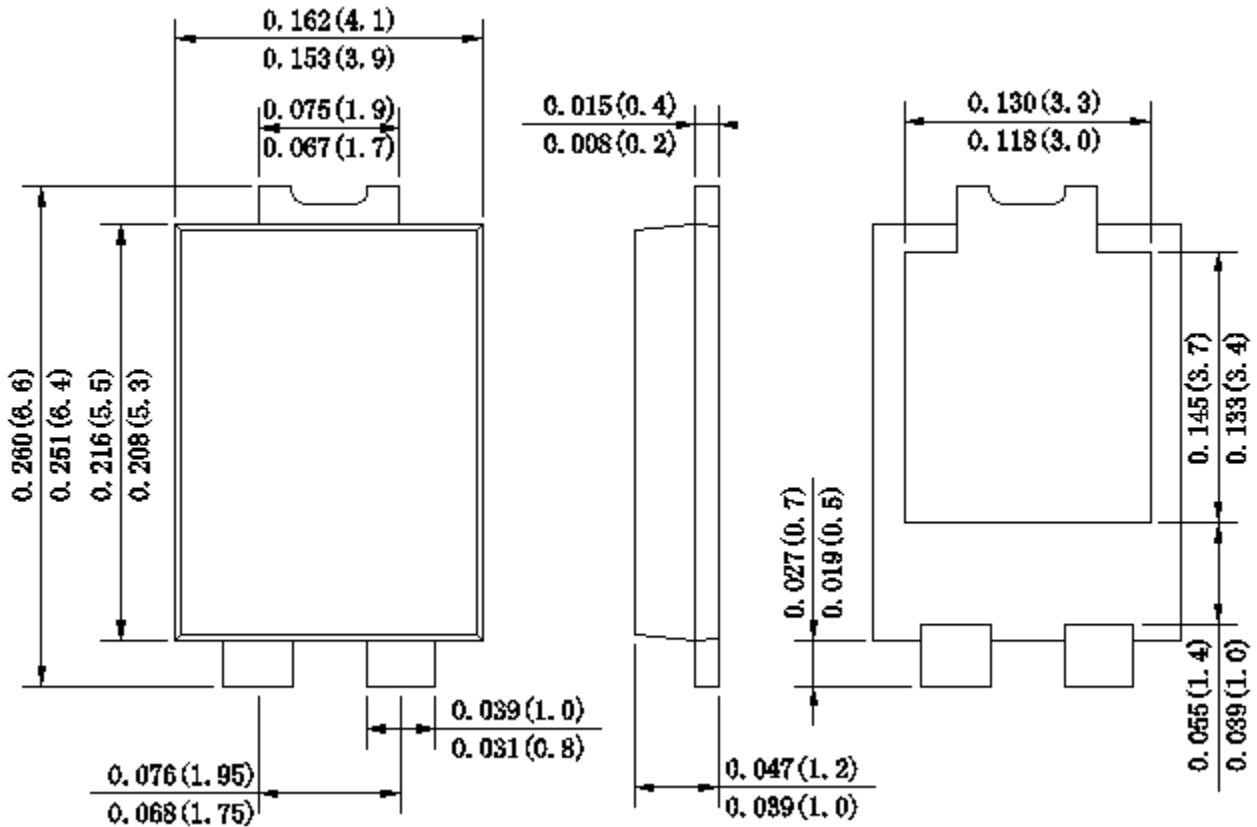


- Package Information

Ordering Information

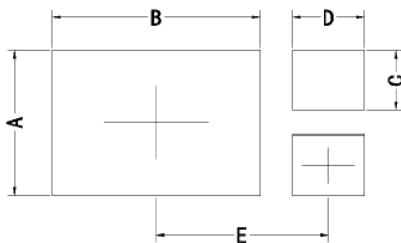
| Device | Package | Qty per Reel | Reel Size |
|------------|---------|--------------|-----------|
| SSCS10XXTC | TO-277B | 5000 | 13 Inch |

Mechanical Data



Dimensions in inches and (millimeters)

Recommended Pad outline



| Symbol | Unit (mm) | Unit (inch) |
|--------|-----------|-------------|
| A | 3.60 | 0.142 |
| B | 5.35 | 0.211 |
| C | 1.50 | 0.059 |
| D | 1.85 | 0.073 |
| E | 4.30 | 0.169 |



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