# SSCSSS52TC THUR SSCSSS520TC

## 5.0Amp Schottky Barrier Rectifiers

## ● Features

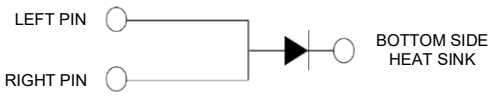
- ✧ The plastic package carries Underwriters Laboratory
- ✧ Flammability Classification 94V-0
- ✧ Construction utilizes void-free molded plastic technique
- ✧ Low reverse leakage
- ✧ High forward surge current capability
- ✧ High temperature soldering guaranteed 260℃/10 seconds at terminals

## ● 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℃

| Parameter | Symbol | SSCSSS | | | | | | | Unit |
|---|---|---|---|---|---|---|---|---|---|
| | | 52TC | 54TC | 56TC | 58TC | 510TC | 515TC | 520TC | |
| Maximum Peak Repetitive Peak Reverse Voltage | $V_{RRM}$ | 20 | 40 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 14 | 28 | 42 | 56 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 20 | 40 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 5.0 | | | | | | | A |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | $I_{FSM}$ | 150.0 | | | | | | | A |
| Max Instantaneous Forward Voltage at 5.0 A | $V_F$ | 0.55 | | 0.70 | 0.85 | | 0.95 | | V |
| Maximum DC Reverse Current Ta = 25 ℃<br>at Rated DC Blocking Voltage Ta =125 ℃ | $I_R$ | 0.5<br>50 | | | | 0.05<br>10 | | | mA |
| Typical Thermal Resistance | $R_{QJA}$ | 60.0 | | | | | | | ℃/W |
| Operating Temperature | $T_J$ | -55 ~ +150 | | | | | | | ℃ |
| Storage Temperature | $T_{STG}$ | -55 ~ +150 | | | | | | | ℃ |

## Typical Performance Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

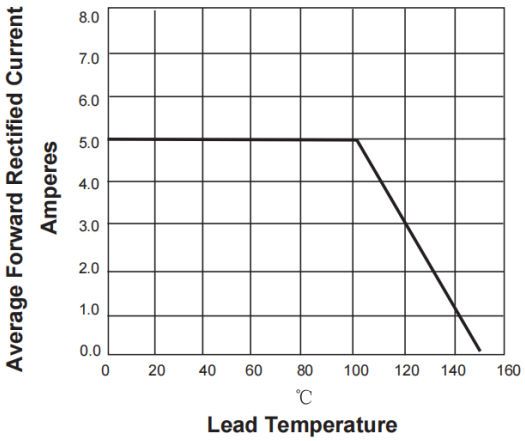



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

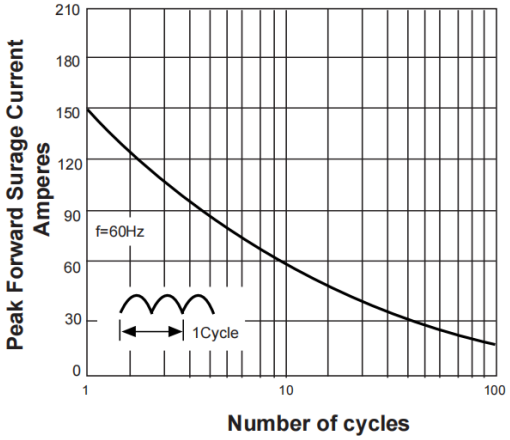



FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

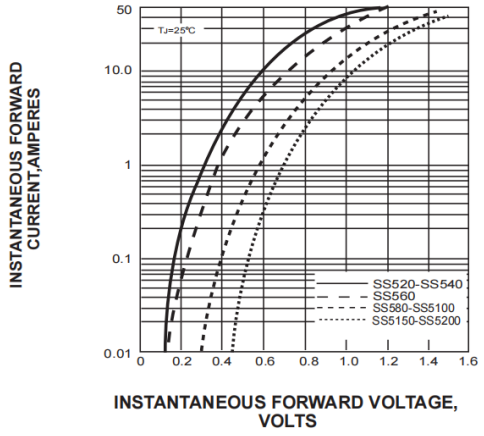
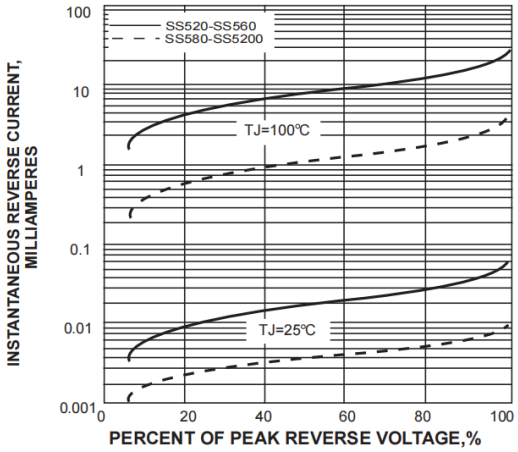



FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

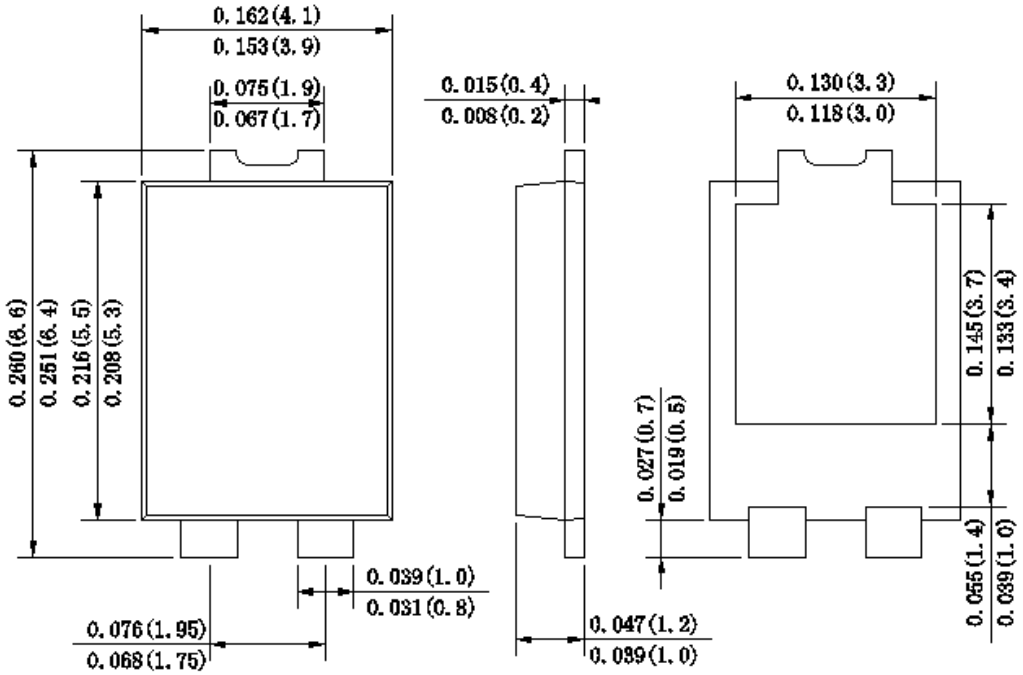


## ● Package Information

### Ordering Information

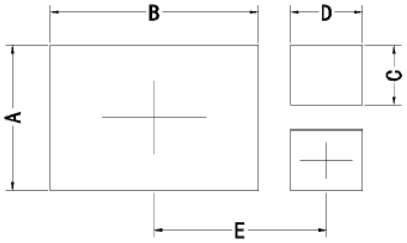
| Device | Package | MARKING | Qty per Reel | Reel Size |
|---|---|---|---|---|
| SSCSSS52TC | TO-277B | SS52 | 5000 | 13 Inch |
| SSCSSS54TC | TO-277B | SS54 | 5000 | 13 Inch |
| SSCSSS56TC | TO-277B | SS56 | 5000 | 13 Inch |
| SSCSSS58TC | TO-277B | SS58 | 5000 | 13 Inch |
| SSCSSS510TC | TO-277B | SS510 | 5000 | 13 Inch |
| SSCSSS515TC | TO-277B | SS515 | 5000 | 13 Inch |
| SSCSSS520TC | TO-277B | SS520 | 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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