



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

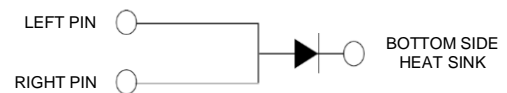
● PIN configuration



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

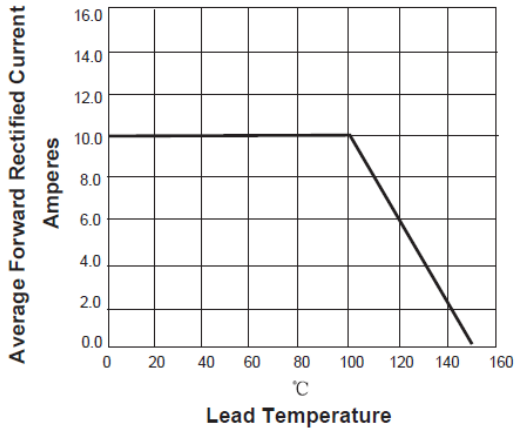


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

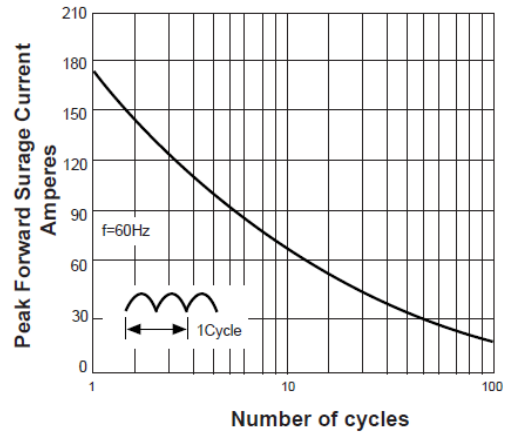


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

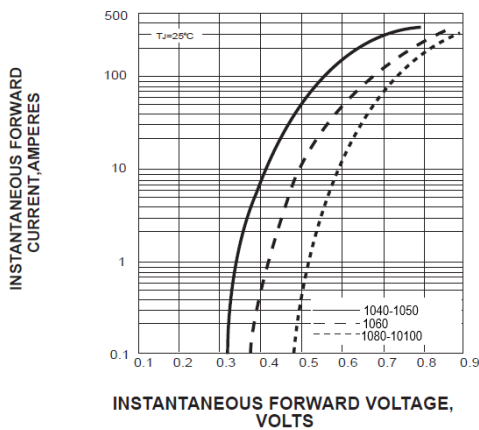
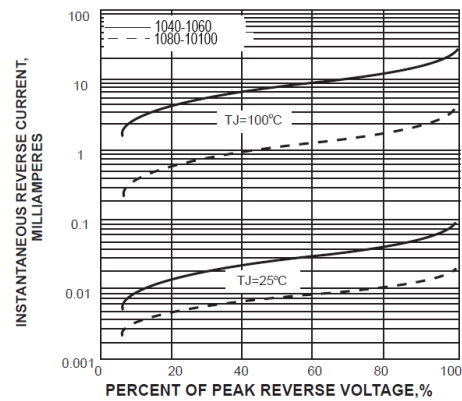


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



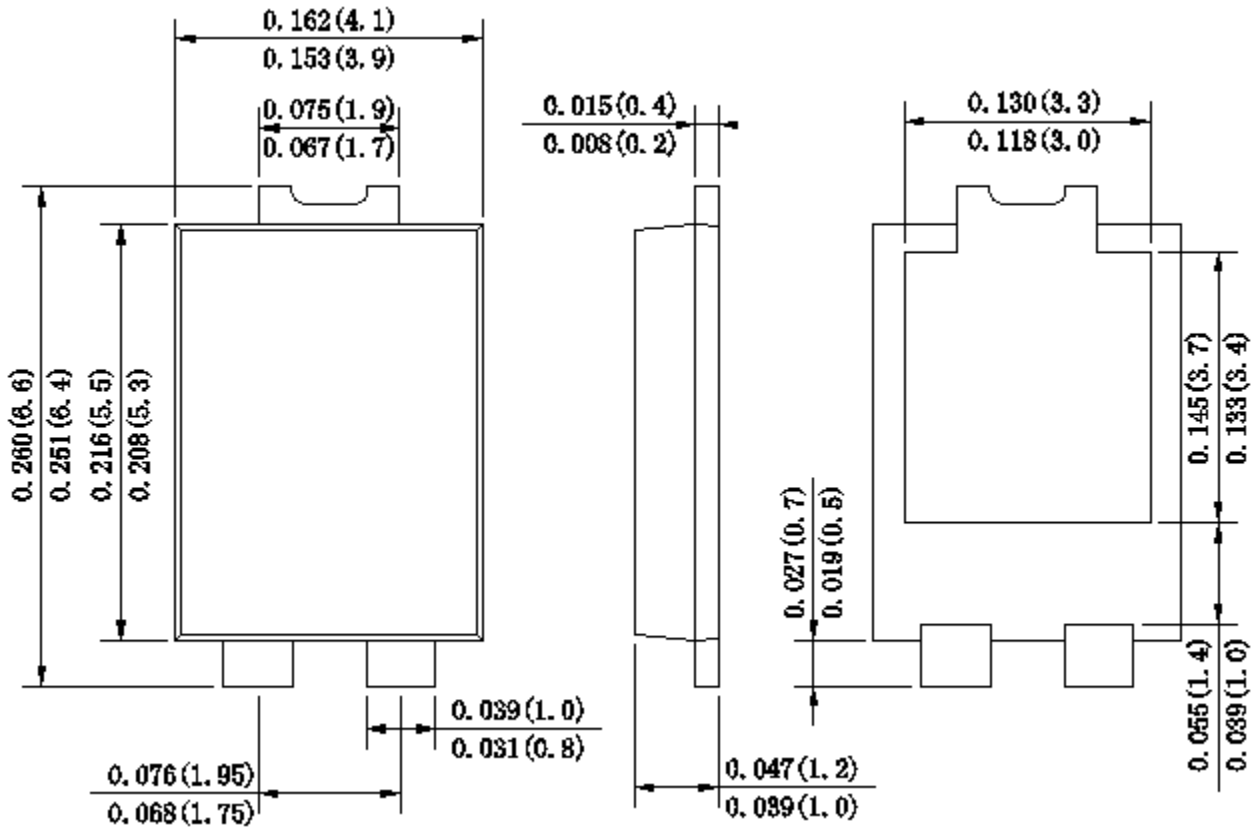


- Package Information

Ordering Information

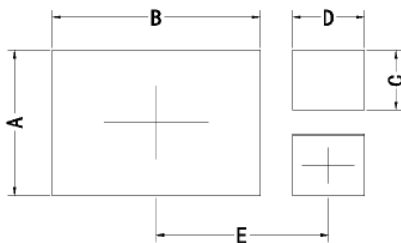
Device	Package	Qty per Reel	Reel Size
SSCS10XXTC	TO-277B	5000	13 Inch

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



DISCLAIMER

SSCSEMI RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. SSCSEMI DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICIENCE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G. OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G. OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.