

**Surface Mount Schottky Barrier Rectifier**

**Reverse Voltage - 40 to 200 V**

**Forward Current - 20 A**

**FEATURES**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals

**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
- ◆ Weight : 0.003 ounce, 0.092 grams



**TO-277**

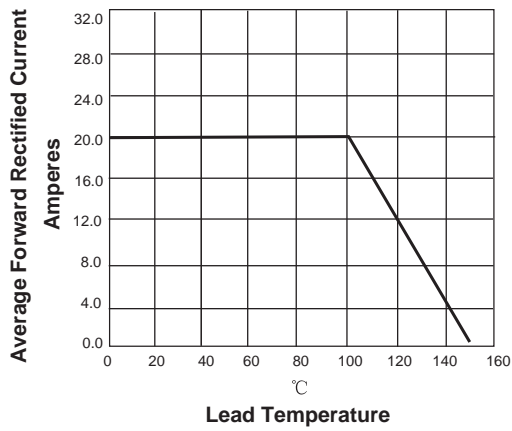
**Absolute Maximum Ratings and Electrical characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

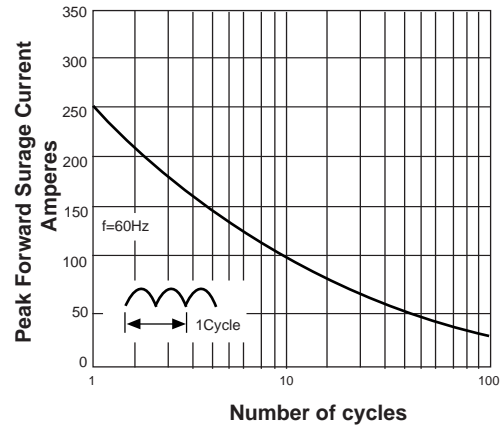
Parameter	Symbols	SS2040SP	SS2045SP	SS2060SP	SS2080SP	SS20100SP	SS20150SP	SS20200SP	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	45	60	80	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	28	31.5	42	56	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	45	60	80	100	150	200	V
Maximum Average Forward Rectified Current at T <sub>L</sub> =100°C	I <sub>(AV)</sub>	20.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I <sub>FSM</sub>	250.0							A
Maximum Instantaneous Forward Voltage at 20 A	V <sub>F</sub>	0.55	0.70	0.85		0.95		V	
Maximum Instantaneous Reverse Current T <sub>A</sub> = 25°C at Rated DC Reverse Voltage T <sub>A</sub> = 125°C	I <sub>R</sub>	100 50			10 20			u A mA	
Typical Thermal Resistance	R <sub>θJA</sub>	60.0							°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150							°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ +150							°C

**Ratings And Characteristic Curves**

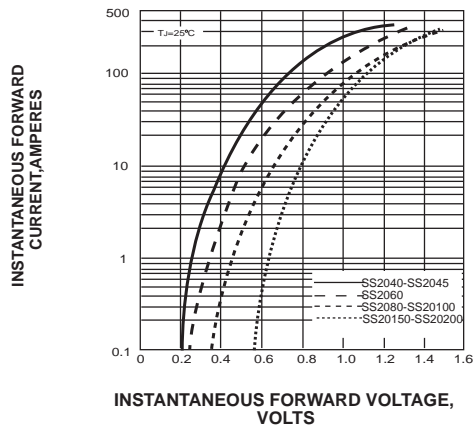
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



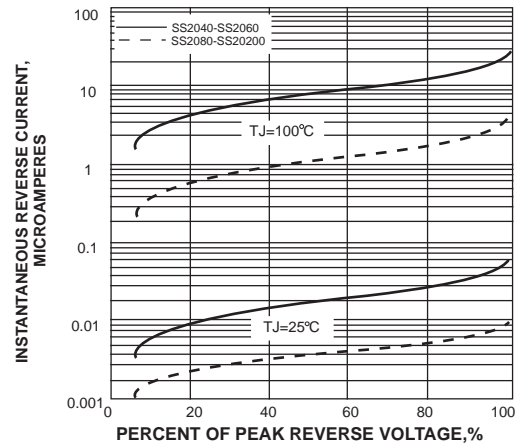
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG**



**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**

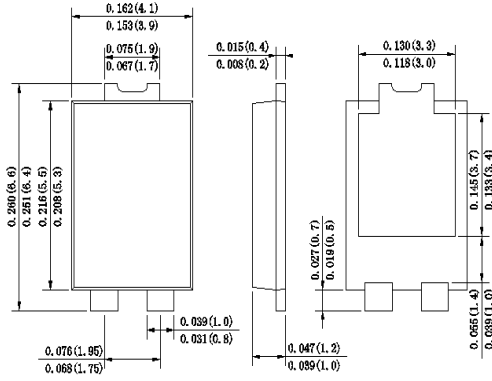


**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



Package Outline

TO-277



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
TO-277	Tape/Reel, 13" reel	5000	EIA-481-1