

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



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_{RRM}	40	45	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	31.5	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	60	80	100	150	200	V
Maximum Average Forward Rectified Current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	20.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I_{FSM}	250.0							A
Maximum Instantaneous Forward Voltage at 20 A	V_F	0.55	0.70	0.85	0.95				V
Maximum Instantaneous Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_A = 125^\circ\text{C}$	I_R	100 50			10 20				μA mA
Typical Thermal Resistance	$R_{\theta JA}$	60.0							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-55 ~ +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150							$^\circ\text{C}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

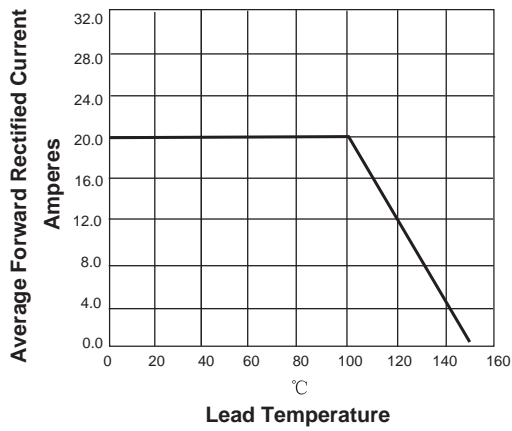


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

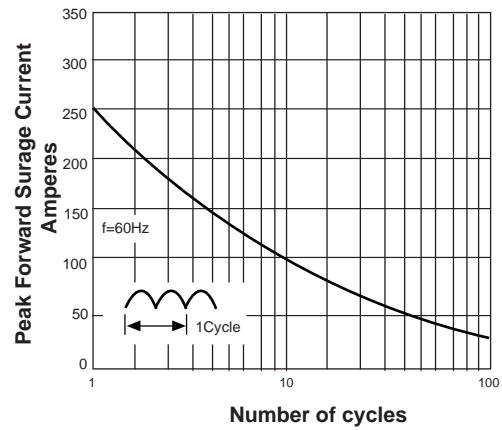


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

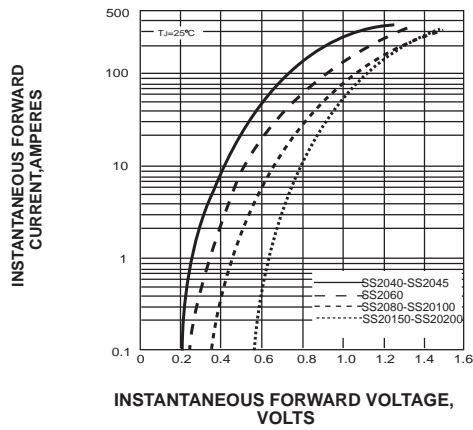
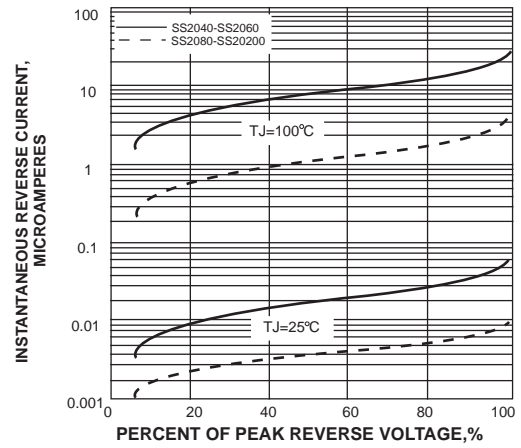
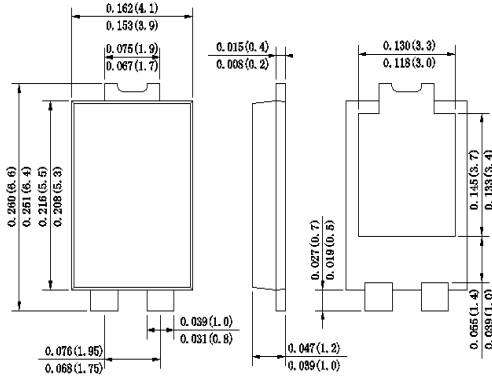


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



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