

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40 to 200 V

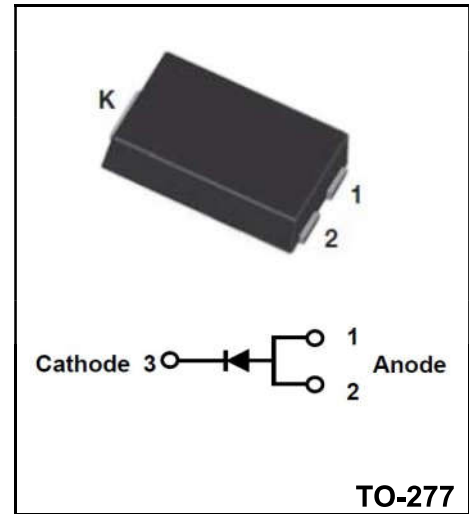
Forward Current - 10 A

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
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆ Case: TO-277
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.003g / 0.092oz



Absolute Maximum Ratings and Electrical characteristics

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

Parameter	Symbols	SS1040SP	SS1045SP	SS1060SP	SS1080SP	SS10100SP	SS10150SP	SS10200SP	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 TL=100°C	$I_{F(AV)}$	10.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	175.0							A
Maximum Instantaneous Forward Voltage at 10 A	V_F	0.55	0.70	0.85	0.95				V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	I_R	0.5 50		0.05 10					mA
Typical Thermal Resistance	$R_{\theta JA}$	60.0							°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150							°C
Storage Temperature Range	T_{stg}	-55 ~ +150							°C

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

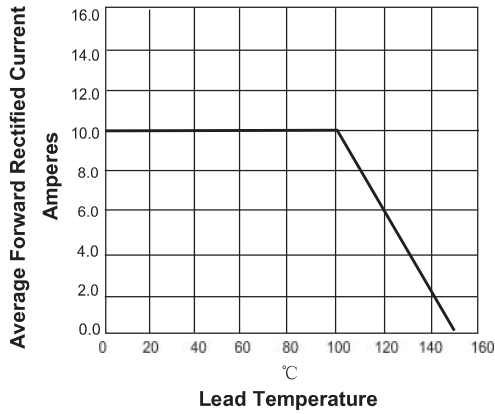


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

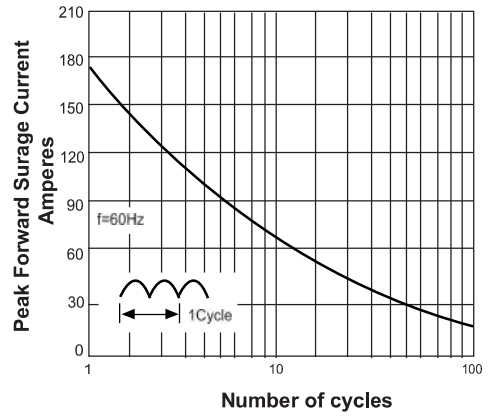


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

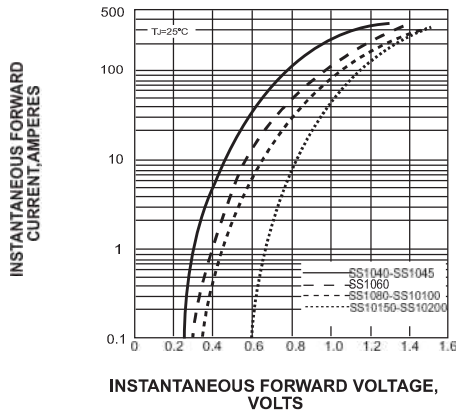
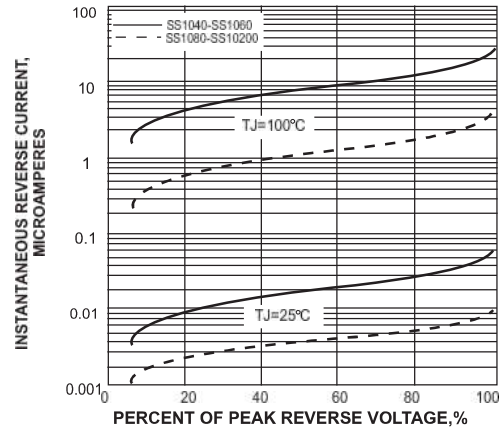


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

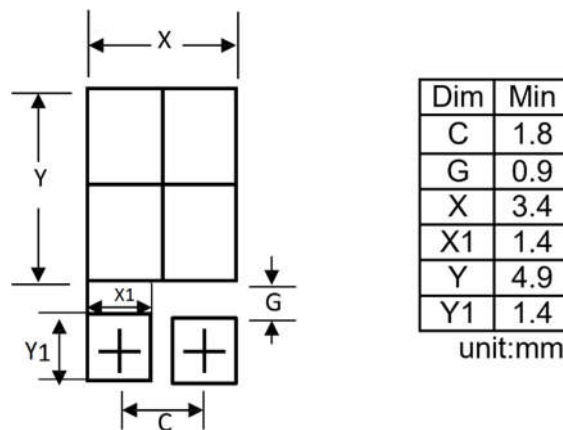
Package	Packing Description	Packing Quantity
TO-277	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

TO-277

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.1	1.2	43	47
A2	0.3	0.4	12	16
b1	0.8	1	32	39
b2	1.7	1.9	67	75
D	3.9	4.1	154	162
D1	3.054		120	
E	6.4	6.6	252	260
e	1.84		73	
E1	5.3	5.5	209	217
E2	3.549		140	
L	0.8	1	32	39
L1	0.5	0.7	20	28
W	1.1	1.4	43	55

The recommended mounting pad size



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