

Surface Mounted Schottky Barrier Rectifiers

Reverse Voltage - 40V ~ 100V

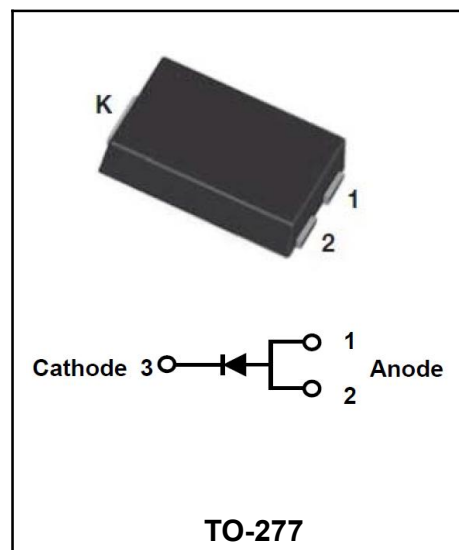
Forward Current - 20 A

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low forward voltage drop
- ◆ 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



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	20L40SP	20L45SP	20L50SP	20L60SP	20L80SP	20L100SP	UNITS
Maximum 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 at T _L =100℃	I _(AV)	20.0						A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load	I _{FSM}	300.0						A
Maximum instantaneous forward voltage at2.0A at20.0A	V _F	0.35 0.48			0.40 0.55	0.45 0.70		V
Maximum DCreverse current T _A =25℃ at rated DC blocking voltage T _A =125℃	I _R	0.5 50				0.2 20		mA
Typical thermal resistance	R _{qJA}	60.0						℃/W
Operating junction temperature range	T _J	-55 to +150						℃
Storage temperature range	T _{STG}	-55 to +150						℃

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

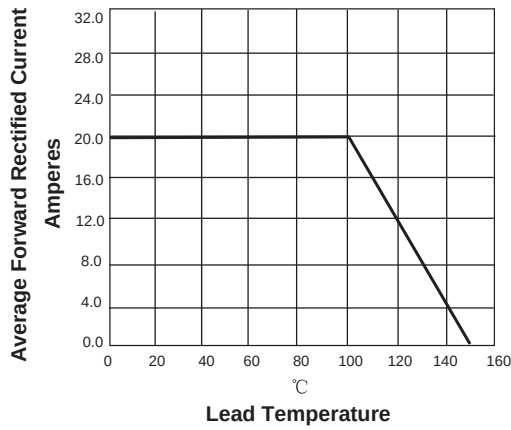


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

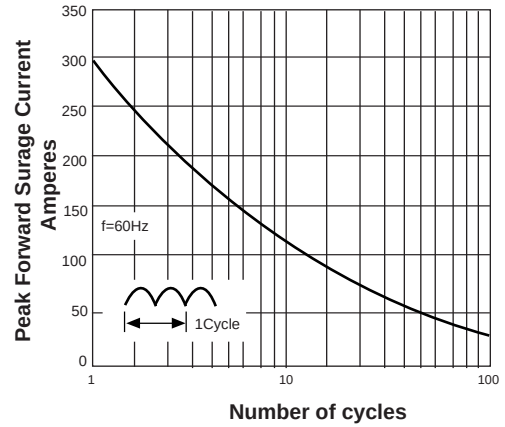


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

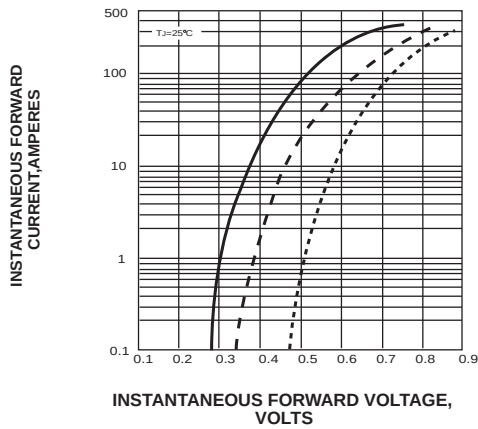
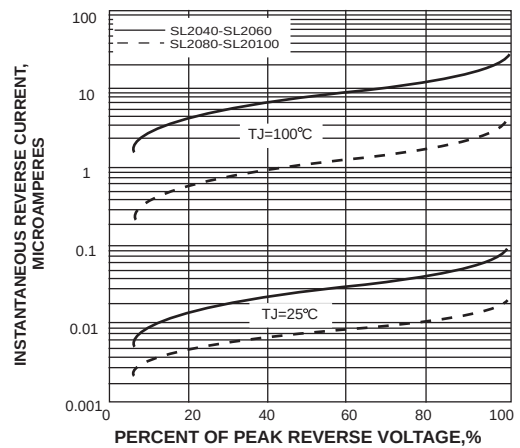
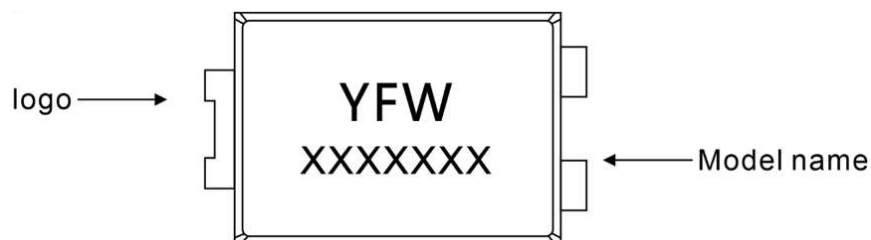


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

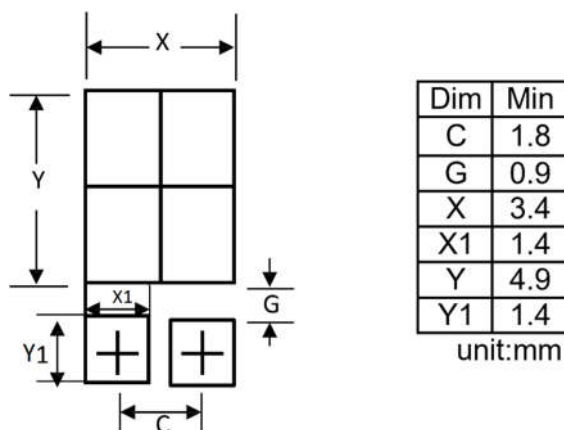
Package	Packing Description	Packing Quantity
TO-277	Tape/Reel, 13"reel	5000PCS/Reel 50000PCS/Carton

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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