

# S34L THRU S320L

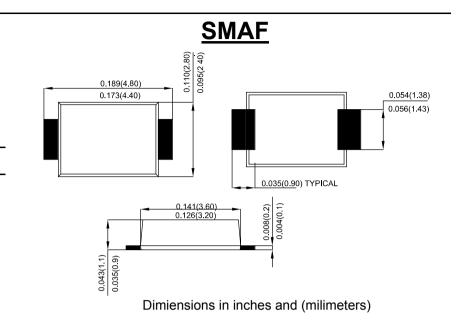
**3.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER** 

#### Features

- Schottky Brrier Chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 80A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

#### **Mechanical Data**

- · Case: Molded plastic SMAF
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- · Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



#### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	S34L	S345L	S35L	S36L	S38L	S310L	S315L	S320L	Unit
Maximum Recurrent Peak Reverse Voltage	Vrrm	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	VRMS	28	31	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	VDC	40	45	50	60	80	100	150	200	V
Average Rectified Output Current @T∟=90°C	lf(AV)	3.0								А
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ifsm	80								А
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	26.560								A <sup>2</sup> s
Forward Voltage @IF=3.0A	VFM	0.45 0.5			0.	0.6		0.85	V	
Peak Reverse Current @T₄ =25 ℃		0.1 0.05						mA		
At Rated DC Blocking Voltage @TA =100 °C	IR	10				5				ΠA
Typical Junction Capacitance (Note1)	Сл	400			300			pF		
Power Dissipation	PD		1.35		1.5	1.	8		2.55	W
Typical Thermal Resistance (Note 2)	Røjl Røjc Røja	20 24 107							°C/W	
Operating Temperature Range	TJ	-55 to+150							°C	
Storage Temperature Range	Тѕтс	-55 to +150								°C

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Device mounted on FR-4 substrate, 1"\*1", 2oz, single-sided, PC boards with 0.06"\*0.09" copper pad.



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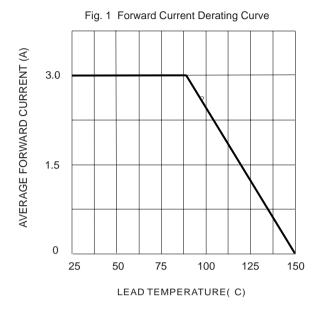
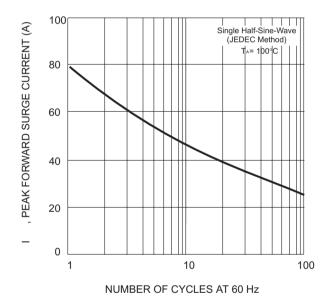
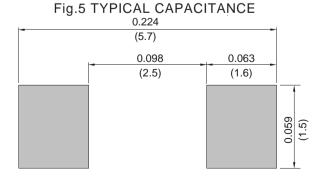


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current





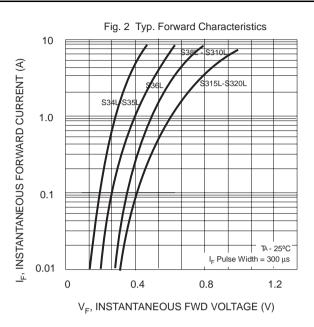
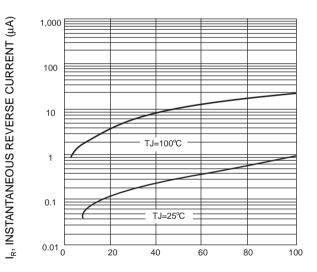


Fig. 4 T ypical Reverse Characteristics (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)



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