

# SL34 THRU SL320

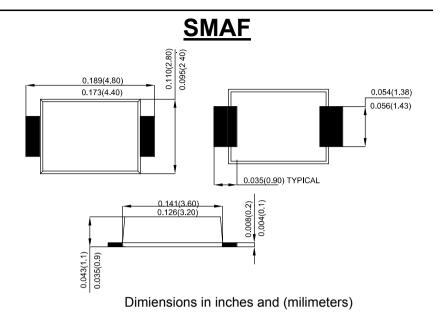
### 3.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

#### **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	SL34	SL345	SL35	SL36	SL38	SL310	SL315	SL320	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	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	<b>I</b> F(AV)	3.0								Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Іғѕм	80							А	
$I^2$ t Rating for Fusing (t < 8.3ms)	l²t	26.560							A <sup>2</sup> s	
Forward Voltage @IF=3.0A	V <sub>FM</sub>		0.45	Ì	0.5	0.	6	(	0.85	V
Peak Reverse Current @TA =25°C		0.1				0.05				mA
At Rated DC Blocking Voltage @TA =100 °C	l <sub>R</sub>	10				5				
Typical Junction Capacitance (Note1)	Сı	400			300				pF	
Typical Thermal Resistance per leg (Note 2)	RθJA	80							$\mathbb{C}/\mathbb{W}$	
Operating Temperature Range	Тл	-55 to+150							$^{\circ}$ C	
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}$	

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. 1 Forward Current Derating Curve

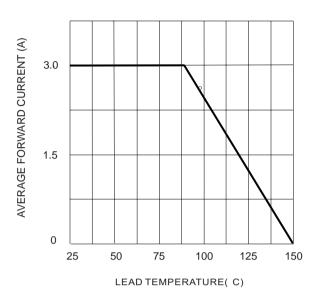


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

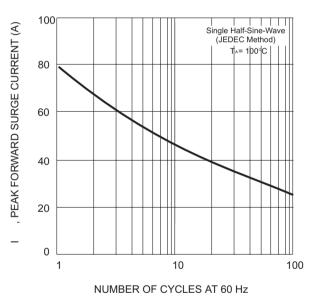


Fig.5 TYPICAL CAPACITANCE

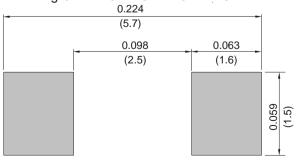


Fig. 2 Typ. Forward Characteristics

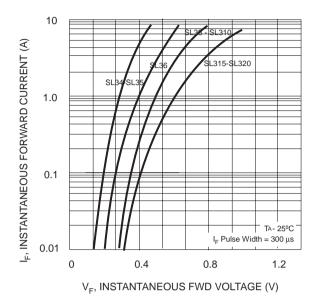
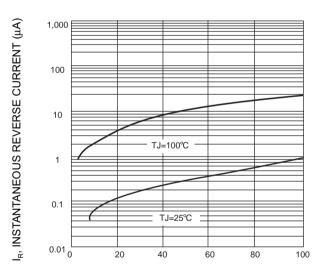


Fig. 4 T ypical Reverse Characteristics (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)



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