

# S3L20U

**ULTRAFAST EFFICIENT  
PLASTIC SILICON RECTIFIER**  
VOLTAGE: 200v      CURRENT: 2.1A

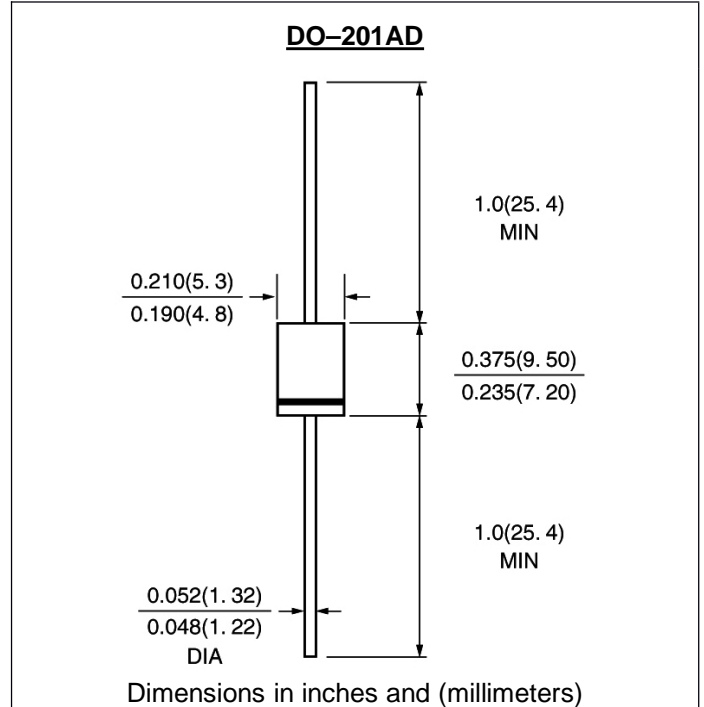


## FEATURE

Low power loss  
High surge capability  
Glass passivated chip junction  
Ultra-fast recovery time for high efficiency  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension

## MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	S3L20U	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	V
Maximum RMS Voltage	V <sub>rms</sub>	140	V
Maximum DC blocking Voltage	V <sub>dc</sub>	200	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =25°C	I <sub>f(av)</sub>	2.1	A
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	60.0	A
Maximum Forward Voltage at Pulse Measurement I <sub>f</sub> =2.1A	V <sub>f</sub>	0.98	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	10.0 100.0	μ A μ A
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	35	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	52	pF
Typical Thermal Resistance (Note 3)	R(ja)	60.0	°C/W
Storage and Operating Junction Temperature	T <sub>stg,Tj</sub>	-55 to +150	°C

### Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted



**FSEMI**

**SUPER FAST RECOVERY RECTIFIER**

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MARKING:

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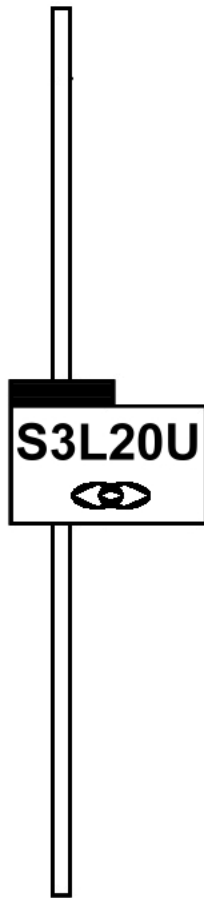


Fig.1 Derating Curve

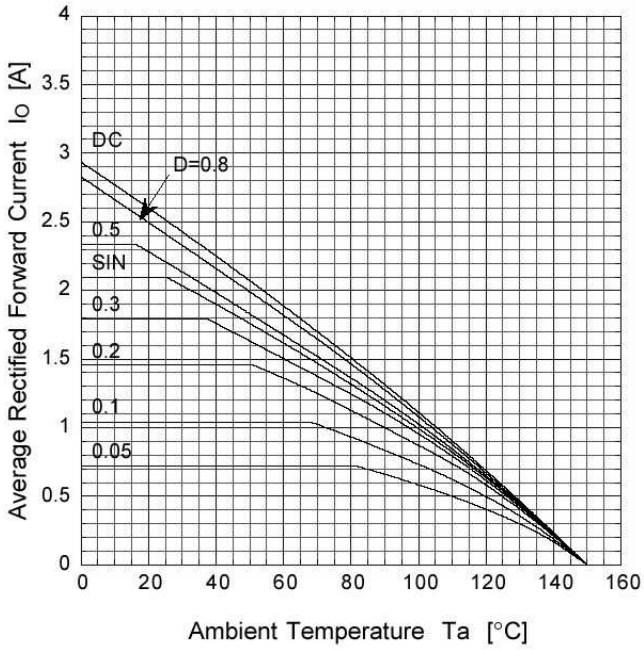


Fig.2 Forward Voltage

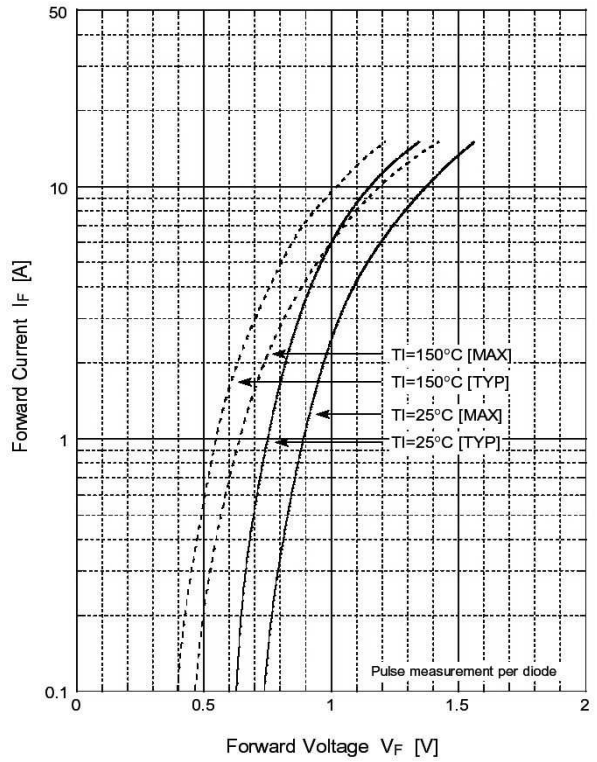


Fig.3 Peak Surge Forward Capability

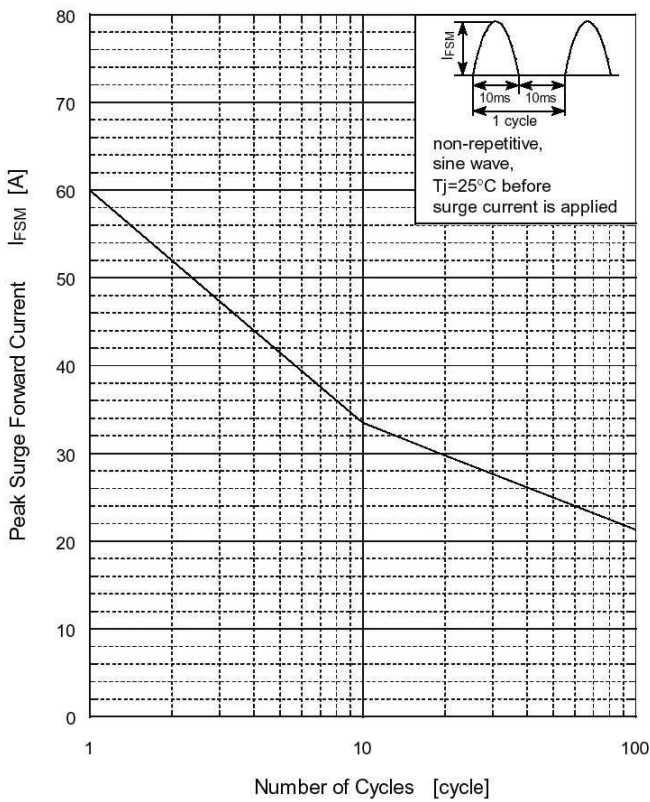


Fig.4 Junction Capacitance

