

02SSL20L THRU 02SSL40L

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### **VOLTAGE RANGE 20 to 40 Volts CURRENT 0.2 Ampere**

#### **FEATURES**

- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage
- \* High current capability
- \* High speed switching
- \* High surge capabitity
- \* High reliability

## **MECHANICAL DATA**

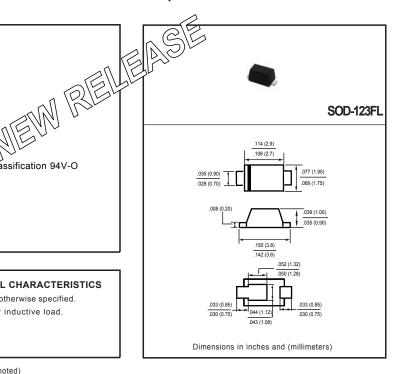
\* Epoxy: Device has UL flammability classification 94V-O

\* Mounting position: Any

\* Weight: 0.016 gram

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



#### MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	02SSL20L	02SSL30L	02SSL40L	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	40	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at T <sub>A</sub> =110°C	Io	0.2			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	60			Amps
Typical Junction Capacitance (Note1)	CJ	110			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	110			°C/W
	$R_{\theta JL}$	30			
Operating Temperature Range	TJ	150			٥C
Storage Temperature Range	T <sub>STG</sub>		°C		

#### ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

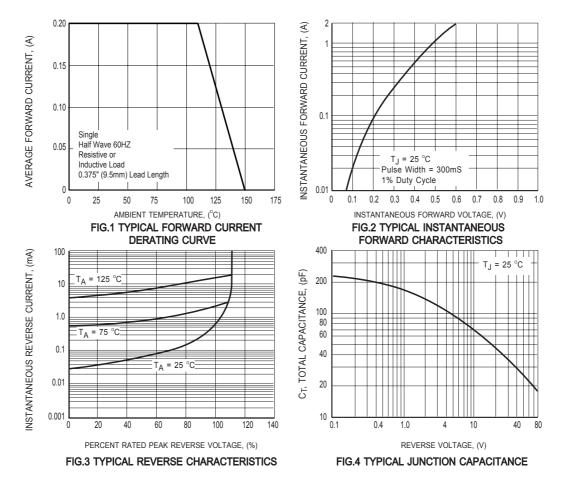
CHARACTERISTICS		SYMBOL	02SSL20L	02SSL30L	02SSL40L	UNITS			
Maximum Instantaneous Forward Voltage at 0.2A DC		V <sub>F</sub>	.28			Volts			
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C	la.	1.0			mAmps			
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C	I IR		mAmps					

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

- 2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
- 3. Thermal resistance: Mounted on PCB.

2006-11

# RATING AND CHARACTERISTICS CURVES ( 02SSL20L THRU 02SSL40L )



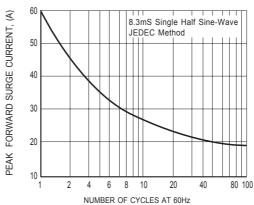
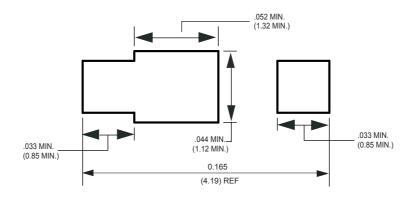


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



# **Mounting Pad Layout**



Dimensions in inches and (millimeters)



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