



## SX33L

### LOW VF SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volts

CURRENT 3.0 Amperes

SMA / DO-214AC

Unit : inch(mm)

### FEATURES

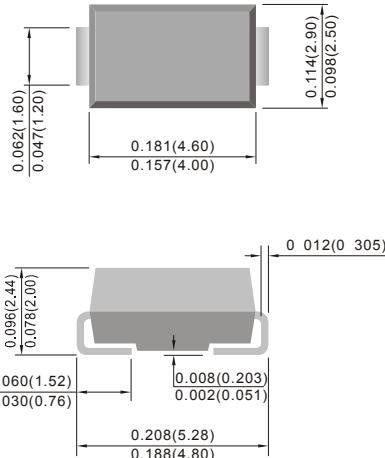
- Low forward voltage drop, low reverse current
- High Efficiency
- Lead free in comply with EU RoHS 2002/95/EC directives

### APPLICATIONS

- Low voltage high frequency inverters
- DC/DC converters
- Polarity protection
- Freewheeling

### MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0023 ounce, 0.0679 gram



### ABSOLUTE MAXIMUM RATINGS (TA= 25 °C)

PARAMETER	SYMBOL	LIMITS	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RMM</sub>	30	V
Maximum Average Rectified Forward Current	I <sub>O</sub>	3	A
Peak Surge Forward Current	I <sub>FSM</sub>	75	A
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub> R <sub>θJL</sub>	100 20	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (TA= 25 °C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Instantaneous forward voltage (Note 2)	V <sub>F</sub>	I <sub>F</sub> =1A I <sub>F</sub> =2A I <sub>F</sub> =3A T <sub>J</sub> =25°C	-	0.29 0.32 0.35	0.31 0.35 0.37	V
		I <sub>F</sub> =1A I <sub>F</sub> =2A I <sub>F</sub> =3A T <sub>J</sub> =125°C	-	0.17 0.21 0.26	-	V
		V <sub>R</sub> =21V T <sub>J</sub> =25°C T <sub>J</sub> =125°C	-	0.3 90	0.5	mA
Reverse current	I <sub>R</sub>		-	0.8 160	1	mA
	V <sub>R</sub> =30V T <sub>J</sub> =25°C T <sub>J</sub> =125°C	-	-	-		

#### NOTES:

1. Mounted on P.C. Board with 25mm<sup>2</sup> copper pad areas.
2. Pulse Test with PW =300μsec, 1% Duty Cycle.