



SX33L

LOW VF SCHOTTKY BARRIER DIODE

VOLTAGE	30 Volt	CURRENT	3 Ampere
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SMA / DO-214AC Unit : inch(mm)

FEATURES

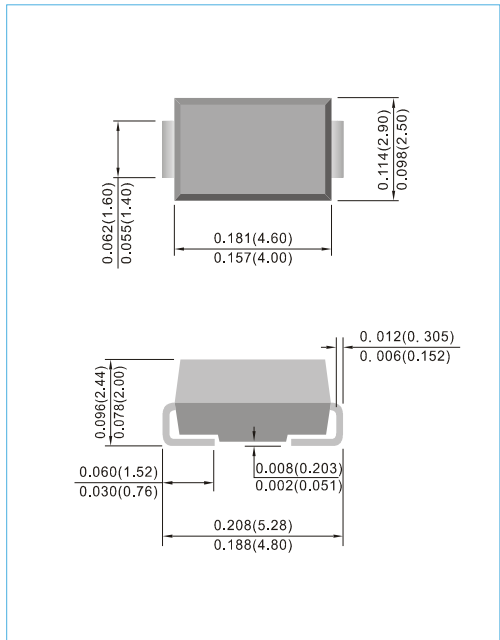
- Low forward voltage drop, low reverse current
- High Efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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: 0.0024 ounces, 0.0679 grams



ABSOLUTE MAXIMUM RATINGS (T_A= 25°C)

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

ELECTRICAL CHARACTERISTICS (T_A= 25°C)

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

NOTES:

1. Mounted on P.C. Board with 25mm² copper pad areas.
2. Pulse Test with PW =300µsec, 1% Duty Cycle.



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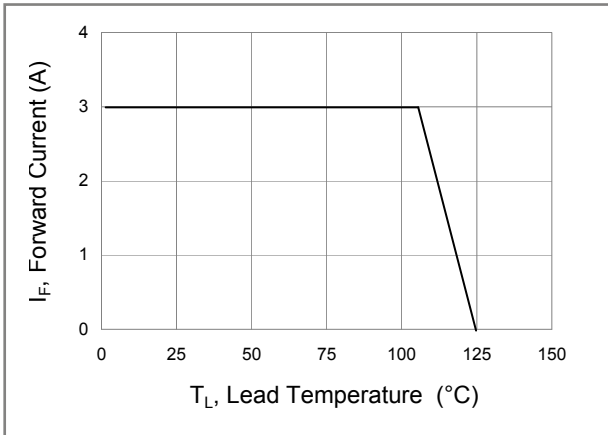


Fig.1 Forward Current Derating Curve

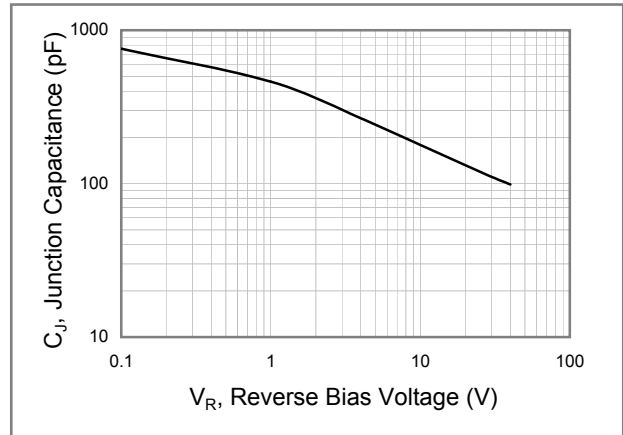


Fig.2 Typical Junction Capacitance

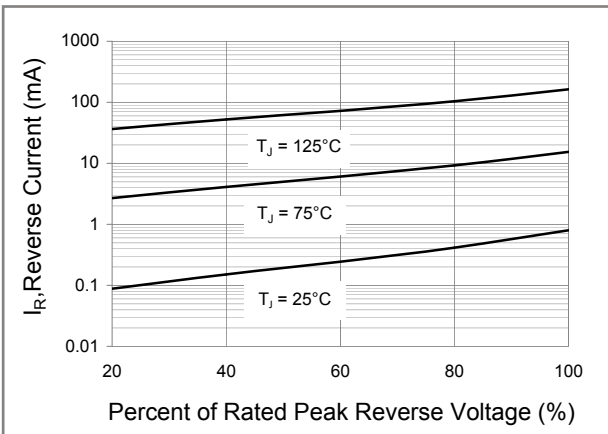


Fig.3 Typical Reverse Characteristics

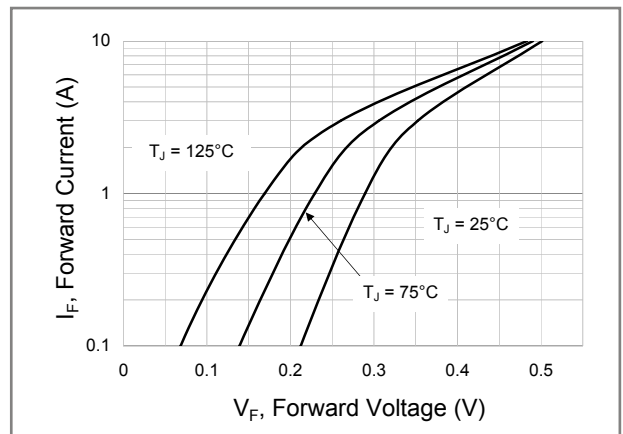


Fig.4 Typical Forward Characteristics

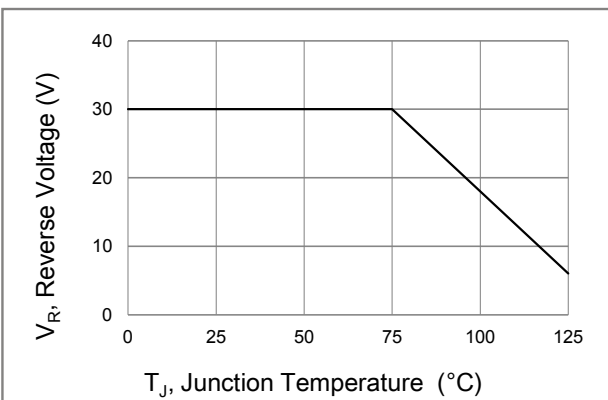


Fig.5 Operating Temperature Derating Curve

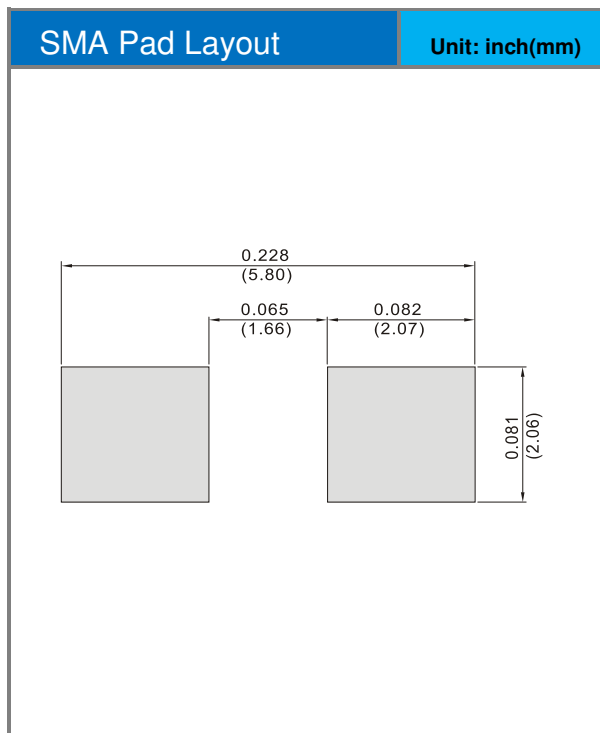


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Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SX33L_R1_00001	SMA	1.8K pcs / 7" reel	SX33L	Halogen free

Mounting Pad Layout





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