



### LOW VF SCHOTTKY BARRIER DIODE

VOLTAGE 30 Volt CURRENT 3.0 Ampere

### **FEATURES**

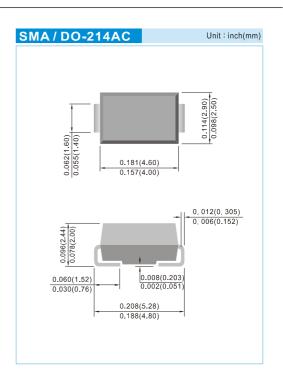
- · Low forward voltage drop, low reverse current
- High Efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### **APPLICATIONS**

- Low voltage high frequency inverters
- DC/DC converters
- · Polanity 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 (TA= 25°C)

PARAMETER	SYMBOL	LIMITS	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	30	٧
Maximum Average Rectified Forward Current	Io	3	Α
Peak Surge Forward Current	IFSM	75	Α
Typical Thermal Resistance (Note 1)	Roja Rojl	100 20	°C/W
Operating Junction Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Тѕтс	-55 to +150	°C

## ELECTRICAL CHARACTERISTICS (TA= 25°C)

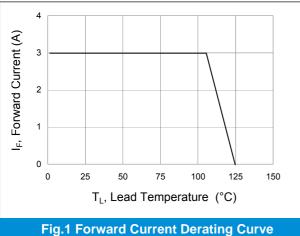
PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Instantaneous forward voltage (Note 2)	VF	F=1A   F=2A   F=3A	TJ=25°C		0.29 0.32 0.35	0.31 0.35 0.37	V
		F=1A   F=2A   F=3A	Tյ=125°C		0.17 0.21 0.26	- - -	V
Reverse current	l a	VR=21V	TJ=25°C TJ=125°C	=	0.3 90	0.5 -	mA
	I <sub>R</sub>	VR=30V	TJ=25°C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

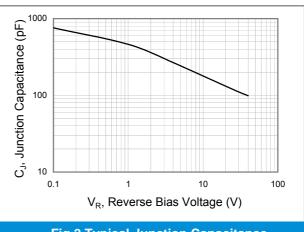
#### NOTES:

- 1. Mounted on P.C. Board with  $25 \text{mm}^2$  copper pad areas.
- 2. Pulse Test with PW =300 $\mu$ sec, 1% Duty Cycle.









**Fig.2 Typical Junction Capacitance** 

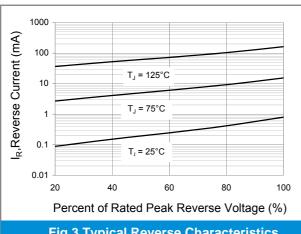
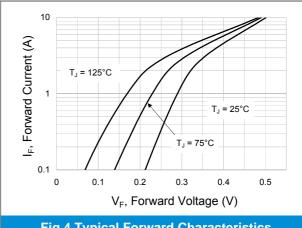
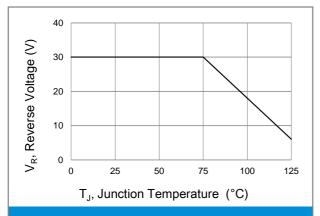


Fig.3 Typical Reverse Characteristics



**Fig.4 Typical Forward Characteristics** 

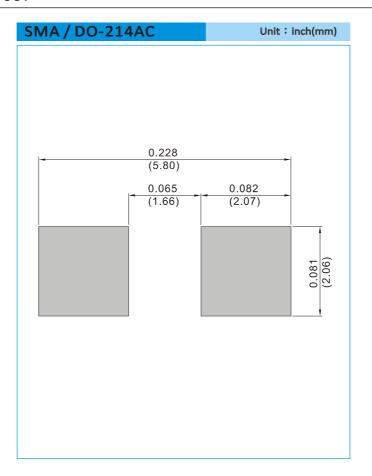


**Fig.5 Operating Temperature Derating Curve** 





## **MOUNTING PAD LAYOUT**



## **ORDER INFORMATION**

• Packing information

T/R - 3K per 13" plastic Reel

T/R - 0.5K per 7" plastic Reel

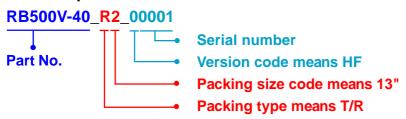




# Part No\_packing code\_Version

SX33L\_R1\_00001 SX33L\_R2\_00001

# For example:



Packing Code XX				Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code	
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	26mm	X				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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